

THE WILDERNESS OF ICE

The Fitzroy Edition of

JULES VERNE

Edited by I. O. Evans



A FLOATING CITY
THE BEGUM'S FORTUNE -
FIVE WEEKS IN A BALLOON
DROPPED FROM THE
CLOUDS
THE SECRET OF THE ISLAND
MICHAEL STROGOFF
THE DEMON OF CAWNPORE
TIGERS AND TRAITORS
FROM THE EARTH TO THE
MOON
ROUND THE MOON
INTO THE NIGER BEND
THE CITY IN THE SAHARA
PROPELLER ISLAND
THE MYSTERY OF ARTHUR
GORDON PYM
20,000 LEAGUES UNDER THE
SEA
AT THE NORTH POLE
THE WILDLRNESS OF ICE
JOURNEY TO THE CENTRE
OF THE EARTH

The Wilderness of Ice

Part Two of
The Adventures of Captain Hatteras

by
JULES VERNE



Edited by
I. O. EVANS
F.R.G.S.



LONDON

ARCO PUBLICATIONS

1901

**PRINTED IN GREAT BRITAIN BY
TAYLOR GARNETT EVANS AND CO. LTD
LONDON AND WATFORD**

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INTRODUCTION

THE book to which this is a sequel, *At The North Pole*, describes the disasters which befell the exploring vessel *Forward* during her cruise into the Arctic. Leaving Liverpool in April 1860, destination unknown, she is directed by orders which arrive very mysteriously from her unseen captain. These disconcerting circumstances, combined with the difficulties and hardships of the voyage, tell on the morale of her crew. They are on the verge of mutiny, and in the face of imminent peril her temporary commander, Richard Shandon, has lost his nerve, when in the nick of time one of the seamen reveals himself as her captain.

He is in fact John Hatteras, so fanatically determined to reach the North Pole, and so utterly regardless of the life of his men, that had he declared himself openly he would never have got a crew to follow him. For a time he succeeds in rallying his discontented seamen, though Shandon, who had hoped to retain command of the ship, remains in a state of sulky non-co-operation.

Such adverse weather does the *Forward* encounter that she is driven far off course, but her captain presses on relentlessly and with typical disregard of consequences. The result is that when she has to face an Arctic winter he has exhausted almost all her fuel. So great are the men's sufferings that Hatteras, accompanied by his faithful dog, Duk, leads a sledge party overland in the hope of finding some opencast coal reported by an earlier explorer. Not only does he fail; one of his men succumbs to exposure and cold, cursing him silently with his dying glance.

Meantime, the sledge-party have found, buried in the ice and nearly dead of cold, Captain Altamont, of the New York vessel *Porpoise*. Though he detests Americans on principle, and regards Altamont as a potential rival, Hatteras takes the man's inanimate body back on the sledge.

When the expedition returns to the *Forward*, they find

her in flames and her magazines explode under their very eyes. Led by the faithless Shandon, the men have deserted to return southwards across the ice, and one sailor, Pen, who cherishes an inveterate hatred of Hatteras, has deliberately set her on fire.

A few have remained faithful to their captain: Johnson, the boatswain, who had been left in charge of the vessel but was powerless to check the mutiny; Bell, the ship's carpenter, and Dr. Clawbonny, not only the expedition's medical officer but a savant as intent on research as the captain is on exploration. They are stirred by his determination to push on to the Pole—but they are left without resources in the depths of the Arctic, alone save for a companion almost at the point of death.

The Introduction to that book explains that when it was written the Pole's surroundings were completely unknown. Strange legends had accumulated round them; at the only two points on the globe which are motionless, it was not unreasonable to suppose that conditions might differ greatly from those prevailing elsewhere on earth. The wildest surmises were made about them—surely the most extraordinary is that of Edgar Allan Poe in his unfinished phantasy *The Narrative of Arthur Gordon Pym*.¹

Compared with this, Verne's own view of the conditions which might prevail in the vicinity of the North Pole seems almost matter of fact—although the reader will not find them disappointing! By the geographical science of the time, they were plausible enough.

The periodical referred to in Chapter X of this book aroused so much interest that it was afterwards reprinted in London under the title of the *North Georgian Gazette and Winter Chronicle*, and it is from that reprint that the extracts in the chapter have been quoted.

Previous translations of the present book have appeared under the titles of *The Field of Ice* and the *Ice Desert*. Although in the original the title is *Le Desert de Glace*, the one I have chosen seems to me to give a better idea of its spirit.

I.O.E.

¹ This, with the continuation which Verne wrote to it, *Sphinx of the Ice fields*, is included in the Fitzroy edition of Jules Verne

CHAPTER I

THE INVENTORY

It had been a daring project, that of Captain Hatteras; he had meant England to have the glory of discovering the North Pole, and he had done all that human power could do. After battling for nine months against currents and tempests; after smashing the icebergs and clearing the ice-banks in the most terrible winter ever experienced in those latitudes; after summing-up in his expedition the work of his predecessors, confirming and, so to speak, revising the story of polar discovery and taking his brig, the *Forward*, beyond the known seas—in short, after accomplishing half his task, he saw his mighty project destroyed!

The treachery, or rather the discouragement, of his crew, worn out by their trials, and the criminal folly of some of their leaders, had left him in an appalling position; out of eighteen men only four remained, and these four were abandoned without supplies, without a ship, more than 2,500 miles from home! The explosion of the *Forward*, which had just blown up under their eyes, had taken away their last means of existence.

Yet even in face of this terrible catastrophe, the courage of Hatteras did not give way. The companions still with him were the pick of his crew—heroes. He appealed to the energy and science of Dr. Clawbonny, to the devotion of Johnson and Bell, to his own faith in his undertaking; he dared to speak of hope in that desperate situation; his gallant comrades heard his words, and the past record of men so determined answered for their future courage.

After the captain's energetic words, the doctor wanted to investigate the position; leaving his companions, who had stopped 500 paces from the brig, he proceeded towards the scene of the catastrophe.

Of the *Forward*, constructed with so much care, nothing

remained. Ice rent asunder, shapeless black and calcined fragments, twisted rods of metal, lengths of cable still burning like firebrands, and, in the distance, a few spirals of smoke writhing about the ice-field, showed the violence of the explosion. The cannon, thrown several cable-lengths away, was resting upon an ice-block as though upon its carriage. For hundreds of yards round the ground was covered with fragments of every sort; the keel lay on a mound of ice; the icebergs, partly melted by the heat of the fire, had already regained their granite hardness.

The doctor remembered his wrecked cabin, his lost collections, his precious instruments smashed to pieces, his burnt and tattered books. Such wealth destroyed! He looked with moist eyes at that terrible catastrophe, thinking not of the future but of the irreparable misfortune which affected him so personally.

He was soon joined by Johnson, whose face bore traces of the sufferings he had undergone in struggling against his mutinous companions, while defending the vessel entrusted to him. The doctor held out his hand, and the boatswain gripped it sadly.

"What is to become of us, my friend?" asked the doctor.

"Who can tell?" answered Johnson.

"Above all, don't let's give way to despair; we must be men."

"Yes, Doctor, we're in a nasty fix, we must see how we can get out of it."

"Our poor old ship!" sighed the doctor; "I'd got very fond of her, just as if she had been my own home, as if I'd spent all my life in her, and now there isn't any of her left!"

"Who would have thought, Dr. Clawbonny, we'd have got so fond of that contraption of beams and planks?"

"But where's the long-boat?" continued the doctor, looking round. "Is that done for, too?"

"No; Shandon and his fellows took it with them."

"And the smaller boat?"

"Smashed into a thousand pieces! Look, these few tin plates are all that's left of it."

"Then there's only the halkett-boat left?"

"Yes, and it's a good thing you took it with you."

"It isn't very much," commented the doctor.

"And those wretched deserters who've gone," exclaimed Johnson, "I hope Heaven will treat them as they deserve!"

"Johnson," the doctor told him gently, "we mustn't forget how they suffered! Only the best of us know how to keep steady in misfortune. We must pity our companions in misery and not curse them."

Then the doctor fell silent, looking anxiously about him.

"What's become of the sledge?" asked Johnson.

"It's about a mile away."

"In Simpson's care, I suppose?"

"No, my friend, poor Simpson has perished from fatigue."

"Dead?" cried the boatswain.

"Yes," answered the doctor.

"Poor fellow!" said Johnson. "But who knows if we ought not to envy his fate!"

"But in place of the dead man we left, we bring back one's who's dying"

"A dying man?"

"Yes! Captain Altamont." The doctor briefly told the boatswain about their experiences.

"An American!" Johnson meditated.

"Yes, everything makes us think he's a citizen of the States. But what was the *Porpoise* that got shipwrecked doing in these waters?"

"It came here to perish, answered Johnson; "it took its crew to their death, like others foolhardy enough to come here. But, at least, Dr Clawbonny, you've got what you went for?"

"That coal?"

"Yes."

The doctor shook his head sadly.

"Nothing?" asked the old sailor.

"Nothing! Our supplies ran out, and we were worn out with weariness! We didn't even reach the coast that Belcher spoke of!"

"Then we've got no fuel?"

"No!"

"And no food?"

"No!"

"And not even a ship to take us back to England?"

The doctor and Johnson fell silent. It required superhuman courage to look the terrible position in the face.

"Well," continued Johnson at last, "now we know the worst. But first things first; this cold is piercing—we must build an igloo."

"Yes," answered the doctor; "with Bell's help that'll be easy. Then we must go and fetch the sledge, bring back the American, and consult with Hatteras."

"Our poor captain!" said Johnson, able to forget his own position. "How he must be suffering!"

The two returned to their companions

Hatteras was standing motionless, with his arms as usual crossed, mute, and looking into space. His face had regained its habitual firmness. What was this extraordinary man thinking about? Was he preoccupied with his desperate position or his thwarted plans? Was he thinking of going back, now that both men and elements conspired against him?

No one could guess his thoughts. His faithful Duk^f remained beside him, braving with him a temperature fallen to 32° below zero.

Bell, sprawled on the ice, seemed to have lost all consciousness, and this might well cost him his life; he risked being frozen solid. Johnson shook him vigorously, rubbed him with snow, and at last succeeded in arousing him

"Come, Bell, don't give way like that, man; get up; we've got to talk about what's to be done, and we must have a shelter. Come, you haven't forgotten how to make an igloo! Come and help! Here's a good iceberg that only wants to be hollowed out!"

Encouraged by these words, Bell let his friend drag him to his feet.

"While we're making it, Dr. Clawbonny will take the

trouble to go along to the sledge and bring it back here with the dogs."

"I'm ready," replied the doctor, "and in less than an hour I'll be back."

"Will you go with him, Captain?" said Johnson, going towards Hatteras.

He, though seemingly in deep thought, had heard what was said, for he replied gently: "No, my friend; not, if the doctor will be kind enough. We'll have to come to some decision before the day's out, and I want to be alone to think. Go and do what you think best for the time being. I'm thinking about the future!"

Johnson went back to the doctor.

"It's queer," he said; "the captain seems to have forgotten all his anger; I've never heard him speak so kindly."

"Good!" replied the doctor. "He's got back his self-control. I believe he'll be able to save us yet!" Pulling up his hood and grasping his iron-shod staff, he set out for the sledge through a mist that the moon made almost luminous.

Johnson and Bell at once set to work; the old sailor tried to encourage Bell, who worked away in silence; they need not build but only hollow out a large block; the ice was very hard, and made the work difficult, but its very hardness guaranteed the solidity of the result. Soon the two were able to work under cover, throwing outside the ice they cut away.

Hatteras walked up and down repeatedly, only to stop short; clearly he was unwilling to go where his brig had been.

As he had promised, the doctor was soon back. He brought Altamont wrapped in the tent and lying on the sledge; the Greenland dogs, thin, worn out, famished, could scarcely haul the load and were gnawing at their harness; it was time for animals and men to get some food and rest.

While the house was being finished the doctor had been lucky enough to find a small stove which the explosion had spared, excepting the bent flue-pipes which were easily

straightened; he brought it back with an air of triumph. In about three hours the igloo was ready and the stove placed inside it; stuffed with splinters of wood, it was soon roaring away and spreading around a beneficent heat.

The American was carried in and wrapped in blankets; the four Englishmen took their places round the stove. The last of the food from the sledge, a little biscuit and a drink of boiling tea, comforted them somewhat. Hatteras did not speak and the others respected his silence.

When the meal was over, the doctor signed to Johnson to follow him out.

"Now," he said, "we must make an inventory of what we've got left. Our treasures are scattered everywhere; we must get them together, for snow may fall at any minute, and then we shouldn't be able to find the slightest vestige of the ship."

"Don't let's lose any time, then," answered Johnson; "we must have food and fuel."

"Very well! We must each search one side, so as to cover the whole radius of the explosion. We'll begin in the centre and work outwards."

They went off to the place where the *Forward* had been, and searched about carefully by the fitful light of the moon. It was like a hunt; the doctor showed a hunter's enthusiasm and his heart pounded when he found one of the cases still almost intact; but most of them were empty, their remains strewn over the ice-field.

The force of the explosion had been so great that most of the things they found were nothing but dust and ashes. The larger parts of the engine were lying in fragments here and there; the smashed blades of the screw were a hundred yards from the ship, buried deeply in the snow; the cylinders had been wrenched from their bed; the funnel was split from end to end and lay half crushed under an enormous iceberg; all the pieces of iron that help to build a ship lay strewn about, with the bolts, the clamps, all the metal parts of the brig scattered like machine-gun bullets. But this iron, which would have made the fortune of a tribe of Esquimaux, was of no use here. What it

was most important to find was food, and of this the doctor found very little.

"This is a bad look-out," he said to himself; "the food store, so near the powder-magazines, must have been destroyed by the explosion; what wasn't burnt must have been blown to atoms. That's bad, and if Johnson doesn't do better than I have, I don't know what will become of us."

But as he searched farther afield he came upon about fifteen pounds of pemmican and four stone jars, which, having been thrown on to the soft snow, were not broken and contained five or six pints of brandy. He also found two packets of anti-scorburatics.

In about two hours he and Johnson met and described their finds. There was, unfortunately, little food—a few pieces of salted meat, about fifty pounds of pemmican, three bags of biscuit, a little chocolate, some brandy, and about two pounds of coffee, picked up grain by grain on the ice. They found neither blankets, hammocks, nor clothing; the fire must have devoured them all.

Together they found about enough food for three weeks on short commons; little enough for men so exhausted. Thus, through a series of disastrous circumstances, Hatteras, who had already run out of coal, had now run out of food. The fuel supplied by the wreckage of the ship might last about three weeks. But the doctor, before using it to heat their igloo, asked Johnson if they couldn't at least build a boat with it.

"No, Dr. Clawbonny," answered the boatswain; "you can't imagine that; there isn't a piece of wood we could use. It will do to warm us for a few days, and then——"

"Then——" repeated the doctor.

"God's will be done!" answered the stout-hearted sailor.

The inventory made, they went back for the sledge; they harnessed the poor wearied dogs to it, much against their will. Then they returned to the scene of the explosion, placed their precious cargo upon the sledge, and brought it back to their igloo. Then, half-frozen, they took their places beside their companions in misfortune.

CHAPTER II

ALTAMONT'S FIRST WORDS

TOWARDS eight in the evening the sky cleared a little, and the constellations shone out with sparkling brilliancy in the now colder atmosphere. Hatteras profited by the change to take his bearings from the stars. He went out without a word, carrying his instruments, anxious to see if the ice-field had drifted any farther. Half an hour later he came back, lay down in a corner of the hut, silent and motionless but not asleep.

Next day the snow again began to fall abundantly; the doctor felt glad he had made his search the evening before, for a vast white curtain soon covered the ice-field, and all trace of the explosion vanished under a shroud three feet thick. All that day it was impossible to go outside, but fortunately their shelter was comfortable; so at any rate it seemed to these wearied travellers. The little stove burnt well, but for the violent gusts which occasionally drove the smoke inside, and its heat enabled them to prepare boiling tea or coffee, the effect of which in these low temperatures is so marvellous.

The poor shipwrecked fellows, as they might well be called, were more comfortable than they had been for a long time; they thought only of the present, forgetting and almost defying the future, which threatened them with death.

The American was suffering less, and gradually returned to life; he opened his eyes, but as yet he could not speak; his lips showed signs of scurvy, and could not produce a sound; but he could hear, and he was told how they were situated. He moved his head in token of thanks; he realized he had been saved from being buried alive, and the doctor knew better than to tell him how near he was

to a more certain death, for in a fortnight, or three weeks at the most, their food would completely run out.

Towards noon Hatteras roused himself and went across to the others. "My friends," he told them, "now we must decide what to do. First of all, I want Johnson to tell me in what circumstances the treachery which brought us here took place."

"What's the use of knowing that?" said the doctor. "It's done and there's no need to think about it."

"I am thinking about it," Hatteras answered; "but when Johnson has explained I'll stop thinking about it."

"This is what happened," replied the boatswain. "I did all I could to stop them——"

"I'm sure of that, Johnson, and I may add that the leaders had been planning it for a long time."

"I think so too," agreed the doctor.

"So do I," added Johnson, "for you'd hardly gone when Shandon took command. He was jealous of you, sir, and the others backed him up. I tried to stand out against him, but it was no use. From that time every one did pretty much as he liked; Shandon let them; he wanted to show the crew that there was an end to hard work and privations. All economy came to an end; the stove was heaped up; they burnt the brig piecemeal. The food was left to the men's discretion, and the drink, too, and for fellows who hadn't had a drop for so long, I leave you to guess how it went down! Things were like that from 7th January to the 17th.

"So," asked Hatteras in grave tones, "it was Shandon who urged the men to revolt?"

"Yes, Captain."

"Let's hear no more about him! Go on, Johnson."

"It was about 24th or 25th January that they began to think about leaving the ship. They decided to make for the west side of Baffin Bay; there they meant to take to the long-boat and look for one of the whalers, or get to the Greenland colonies on the east coast. There was plenty of food; the invalids, aroused by the hope of getting home, got better. They began to get ready to set out at once;

a sledge was built to carry the food and fuel, and the long-boat; the men were going to haul it.

"All that took till 15th January. I hoped every day you would come, Captain, and yet I feared it; you would have done no good, for the crew would sooner have massacred you than stay on board. They seemed mad to get away. I spoke to each of them in turn; I explained the dangers they were running into, and their cowardice in leaving you. I couldn't do a thing even with the best of them.

"The start was fixed for 22nd February, for Shandon was impatient. They filled the sledge and the long-boat with all the food and drink they could hold, and plenty of wood; already the ship's starboard side was gone down to the waterline. On the last day they were all drunk, and it was then that Pen and two or three others set the ship on fire. I struggled with them, but they knocked me about. They started off with Shandon leading them, and vanished out of my sight. I was alone: what could I do with the whole ship on fire? I hadn't even a drop of water, for the hole we'd made was blocked up with ice. The *Forward* burned for two days, and you know the rest."

When Johnson's tale was told, a long silence reigned in the igloo; the sad end of the precious brig was vivid in the minds of the castaways, and they dared not look at one another for fear of reading their own despair on each other's faces. The painful breathing of the American was the only sound.

At last Hatteras spoke. "Johnson," he said, "I thank you; you did all you could to save my ship, but alone you could do nothing. Again, I thank you, and now we'll say no more about that disaster. We'll do our best for our own safety. There's four of us here, four friends, and one of our lives is as precious as another. We'll each give his opinion about what's to be done."

"You ask us, Hatteras," answered the doctor; "we're devoted to you and we mean what we say. Have you got any ideas?"

"None at all," Hatteras reflected sadly. "I might seem selfish. I want to know your opinion."

"Captain," said Johnson, "before we settle so important a subject, I'd like to know if the brig has drifted, or if we're still in the same place?"

"She hasn't moved," answered Hatteras. "I found we're still at latitude eighty degrees fifteen minutes and longitude eighty-seven degrees thirty-five minutes."

"How far are we from the nearest sea on the west?"

"About six hundred miles," answered Hatteras. "From Smith's Strait."

"The one we could not clear last April?"

"Yes."

"Well, now we know where we are we can say what we think."

"What's that?" said Hatteras, letting his head fall on his two hands, so that he could listen to his companions without looking at them.

"Come, Bell," said the doctor, "what do you think we'd better do?"

"There's no question about it," answered the carpenter; "we must get back without losing a day or an hour; we must go down either south or west to the nearest coast, even if it takes us two months."

"We've only got three weeks' food," Hatteras pointed out, though without raising his head.

"Well," said Johnson, "we must manage it in three weeks, even if we have to go on all fours."

"Nothing is known of that region," objected Hatteras. "We may meet with obstacles, mountains, and icebergs, to block our route."

"That's no reason why we shouldn't try it," said the doctor; "we shall suffer a good deal, that's certain; we must only eat what's really necessary, unless we can hunt——"

"There's only half a pound of powder left," answered Hatteras.

"Come, Hatteras," answered the doctor, "I believe I know what you are thinking of. Have you any practical scheme?"

"No," answered the captain, after a moment's hesitation.

"You can't doubt our courage," the doctor continued; "you know that we'd follow you to the end, but don't you think it's time to give up any hope of getting to the Pole? Treachery has wrecked your plans; you overcame the obstacles of Nature, but not the perfidy and weakness of man. You have done all it was humanly possible to do, and you would have succeeded, I'm sure; but as things are now, don't you feel bound to put off your scheme and try to get back to England, even if you try again?"

"Well, Captain?" said Johnson, as Hatteras remained some time without answering. At last he raised his head and said in a constrained tone: "Do you think we can possibly reach the coast of the strait, wearied as you are, and almost without food?"

"No," answered the doctor, "but it's certain the coast won't come to us. Perhaps farther south we'll meet with some Esquimaux tribes who'll help us."

"Besides," asked Johnson, "mightn't we meet some vessel wintering in the strait?"

"And," added the doctor, "if the strait is blocked up, couldn't we get across it and reach the west coast of Greenland, and then either by Prudhoe Land or Cape York, get to some Danish settlement? In short, Hatteras, there's nothing to be done in this ice field. The road to England is there, down south, and not farther north."

"Yes," said Bell, "Dr. Clawbonny is right; we must start at once. As it is, we've forgotten our country and our people too long."

"Is that your opinion, Johnson?"

"Yes, Captain."

"And yours, Doctor?"

"Yes, Hatteras."

Hatteras still kept silent; but in spite of himself his face betrayed his agitation. Upon his decision depended his whole life; if he retraced his steps, his daring schemes were crushed for ever; he could never hope to begin a fourth attempt of the same kind.

The doctor, seeing that he was silent, spoke again. "Hatteras, we haven't an instant to lose; we must load our food



on to the sledge with as much wood as we can. Six hundred miles under such conditions is a long way, but not impossible; we ought to make twenty miles a day, which will get us to the coast about 26th March——"

"But," asked Hatteras, "can't we wait a few days?"

"What for?" said Johnson.

"I scarcely know. Who can foresee the future? A few days will be scarcely enough to repair our shattered strength! You won't have reached your second halting-place before you will sink from weariness, without even an igloo to shelter you."

"But a horrible death is waiting for us here!" cried Bell.

"My friends," said Hatteras, in almost supplicating tones, "you're giving way to despair before you need to. If I suggested looking for salvation in the north, you'd refuse to follow me, yet there are Esquimau tribes towards the Pole as well as on Smith Strait. The open sea, whose existence is certain, must wash the shores of continents. Nature is logical in all she does. It's quite likely that plants will grow as soon as the cold's over. Mayn't it be a promised land waiting for us up there, and you want to fly from it?"

Hatteras became even more excited as he spoke. "Another day!" he cried. "Another hour!"

Dr. Clawbonny, with his adventurous character and ardent imagination, was beginning to get moved; but Johnson, cooler and wiser, rec'd him to reason and duty.

"Come on, Bell," said he, "to the sledge!"

"Yes, come on," Bell answered.

The two sailors made for the opening.

"Oh, Johnson! You! You!" Hatteras exclaimed. "Well, go then! I shall stay! I shall stay!"

"Captain!" Johnson stopped in spite of himself.

"I shall stay, I tell you! Go! Leave me like the others! Go! Come, Duk, we'll stay together."

The brave dog came barking to his master's side. Johnson looked at the doctor, who did not know what to do; the best thing, perhaps, would be to sacrifice one day to

Hatteras He was still trying to decide, when he felt his arm touched.

He looked round. The American had thrown off his blankets and was crawling over the ground; he had raised himself on his knees, and from his frost-bitten lips came inarticulate sounds. The doctor, astonished and almost frightened, watched silently. Hatteras, too, went to the American and looked at him attentively, trying to find what words the poor fellow wanted to say. After five minutes' effort he produced one word—"Porpoise."

"The *Porpoise*!" cried the captain.

The American nodded.

"In these seas?" asked Hatteras, his heart beating. The sick man nodded again.

"To the north?"

"Yes," the wretched man gestured.

"And you know her position?"

"Yes."

"Exactly?"

"Yes," Altamont gestured once more.

There was a moment's silence. The spectators of this unexpected scene were all anxiety.

"Listen carefully," said Hatteras at last. "You must tell us the ship's position. I'll count the degrees out loud and you must stop me by a sign."

The American moved his head in sign of acquiescence.

"First of all, let's have the longitude. A hundred and five? No. Hundred and six? No. Seven? No. Eight? You mean west, don't you?"

"Yes," signed the American.

"Let's get on; a hundred and nine? Ten? Twelve? Fourteen? Sixteen? Eighteen? Nineteen? A hundred and twenty?"

"Yes," answered Altamont.

"Longitude hundred and twenty degrees," said Hatteras. "And now for the minutes."

He began at number one. Altamont stopped him at fifteen.

"Very well," said Hatteras. "Now for the latitude. You

understand? Eighty? Eighty one? Eighty-two? Eighty-three?"

• The American stopped him with a gesture

"And the minutes? Five? Ten? Fifteen? Twenty? Twenty five? Thirty? Thirty five?"

Another sign from Altamont, who smiled feebly.

"Then," continued Hatteras, gravely, "the *Porpoise* is in longitude hundred and twenty degrees fifteen minutes, and latitude eighty three degrees thirty five minutes?"

"Yes," gestured Altamont for the last time, as he fell fainting into the doctor's arms. The effort had worn him out.

"You see, my friends," cried Hatteras, "salvation lies in the north, always in the north! We shall be saved!"

But after these first joyful words he seemed suddenly struck by a terrible thought. His face changed and he felt himself bitten to the heart by the serpent of jealousy.

Someone else, an American, had gone three degrees beyond him on the way to the Pole. Why? And with what aim?

CHAPTER III

EIGHTEEN DAYS MARCH

THIS new incident, the first words Altamont had spoken, completely changed the situation. Hitherto, the shipwrecked men had been irretrievably lost, with no hope of reaching Baffin Bay, threatened with lack of food during a journey too long for their worn out bodies. Now, less than four hundred miles away, there was a vessel which offered them all they needed and perhaps a method of pushing on to wards the Pole. After, being so near despair, they were one and all hopeful.

But the information Altamont had given was incomplete. After allowing him a few minutes' rest the doctor resumed the conversation, asking him questions in such a way that he had only to nod his head or move his eyes. Thus they learned that the *Porpoise* was an American three masted, from New York, shipwrecked in the midst of the ice, and carrying plenty of food and fuel, although heeled over on her side, she was still intact, and her cargo could be reached.

Altamont and his crew had abandoned her two months before, taking the long boat on a sledge. They wanted to reach Smith Strait, encounter some whaler, and get taken back to America, but fatigue and disease struck them down and, one by one, they fell by the wayside. At last only the captain and two men remained out of a crew of thirty, and if he, Altamont, were still living it was by a miracle, the work of Providence.

Hatteras wanted the American to explain why the *Porpoise* had gone so far north. Altamont made them understand that he had drifted with the ice without being able to withstand it. Hatteras then asked him about the purpose of his voyage, and Altamont alleged that it had been undertaken to traverse the North West Passage. Hatteras did

not press him further, not daring to ask any more questions on that subject.

"Now," said the doctor, "we must do all we can to find the *Porpoise*; instead of making for Baffin Bay, a journey a third shorter will take us to a ship where we'll find everything we need for wintering."

"It's the best thing we can do now," agreed Bell.

"And we mustn't lose a minute," the boatswain pointed out, "for, contrary to the usual practice, we must calculate the length of our journey by the time our supplies will last, and we must start as soon as we can."

"You're right, Johnson," answered the doctor; "if we start tomorrow—that's Tuesday, 26th February, we should reach the *Porpoise* on 15th March or perish. What do you think, Hatteras?"

"That we'd better get ready at once. Perhaps the journey won't be so long as we think."

"Why?" asked the doctor. "Altamont seems quite clear about his ship's position."

"But suppose the *Porpoise* drifted with her ice field like the *Forward*?"

"That's quite possible," said the doctor.

Johnson and Bell said nothing, but Altamont, who had been listening to the conversation, made signs that he wanted to speak. The doctor bent over him, and after a quarter of an hour's circumlocution and hesitation, he learned that the *Porpoise*, stranded on the coast, could not have left her rocky bed.

This intelligence reassured the others, though it destroyed all hope of their getting back to Europe, unless Bell could manage to build a smaller vessel out of the remains of the *Porpoise*. But the first thing to be done was to reach it. The doctor asked the American one last question—had he met with an open sea at the 83° latitude?

"No," replied Altamont.

The conversation ended there, and preparations for departure began at once. Bell and Johnson got to work on the sledge, which badly needed repair; there was no shortage of wood and they had profited by the experience gained

during the journey down south; they knew the disadvantages of this method of transport, and as they had to expect much deep snow they heightened its runners. Bell made a sort of bed in the centre, covered with the tent-cloth, for the American; there was so little food that it added only slightly to the weight of the load, but they made up for this by taking plenty of wood.

While packing the food the doctor made a list of it, and found that they would have to be content with three-quarter rations for a three-week journey. Full rations were kept for the Greenland dogs, and for Duk, too, if he helped with the hauling.

These preparations were interrupted by the need for sleep and rest, which began to be felt at seven that evening; but before going to bed the refugees met round the stove, in which they did not spare the fuel; the poor wretches gave themselves the treat of a warmth to which they had long been unaccustomed. Some pemmican, a few biscuits, and several cups of coffee soon put them in a pleasant mood, largely based on the hope which had reached them so suddenly, and from so far away.

At seven in the morning the work was resumed, and by three in the afternoon it was finished.

It was dark already; the sun had reappeared above the horizon since 31st January, but it only gave a feeble and short-lived light; fortunately the moon rose at half past six, and in that clear atmosphere her rays gave enough light. The temperature, which had been falling for some days, at last reached 35° below zero.

The moment for departure came. Altamont was delighted, though the vibration would increase his sufferings; he made the doctor understand that all the medicine needed to cure the scurvy would be found on the *Porpoise*. They placed him on the sledge as comfortably as possible; the dogs, Duk among them, were harnessed; the travellers threw a last look at the ice field where the *Forward* had once been. Hatterias's face bore for an instant the signs of violent anger, but he soon mastered himself and the little troop set out in dry weather towards the N.N.W.

Each took his usual place, Bell in advance to find the way, the doctor and Johnson behind the sledge steering it, and when necessary pushing it, Hatteras in the rear, verifying the route, and keeping the expedition on Bell's trail. Progress was rapid in the low temperature, as the hard, smooth ice favoured sledge travel; the five dogs easily drew their weight of nine hundred pounds, but they soon got out of breath, and often had to stop and regain it.

Towards seven in the evening the moon's red disc gleamed through the mists on the horizon. Her calm rays shone on the ice, and showed towards the north-west an immense white plain, perfectly level, without any depression or hummock. This part of the sea seemed to have frozen as quietly as a peaceful lake.

It was an immense wilderness, flat and monotonous—such was the impression it gave the doctor, and he transmitted it to his companion.

"You're right, Dr. Clawbonny; it is a wilderness, but there's no fear of our dying of thirst."

"That's an advantage," answered the doctor, "but it proves that we must be very far from land; usually the neighbourhood of a coast is indicated by a multitude of icebergs, and there's not one to be seen here."

"We can't see far because of the mist," Johnson pointed out.

"That's certain, but ever since we started we've been crossing an ice-field which doesn't look like coming to an end."

"Do you know, Dr. Clawbonny, that it's very dangerous walking here? We get used to it and don't think about it; but this frozen surface covers bottomless gulfs."

"You're right, my friend; but we needn't fear being swallowed up. The resistance of this ice sheet at thirty-three degrees below zero is quite large, and it keeps getting harder and harder, for in these latitudes snow falls nine days out of ten, even from April to June, and I believe that its greatest thickness can't be far from thirty or forty feet."

"That's reassuring," answered Johnson.

"Yes, we're not like the skaters on the Serpentine, who fear every minute that the ice will give way beneath them."

"Can they measure the resistance of the ice?" asked the old sailor, always ready to learn.

"Certainly," answered the doctor. "What can't be measured in this world, except the ambition of man—that ambition that is dragging us towards the Pole? At a thickness of two inches the ice will bear a man; at three inches and a half, a man on horseback; at five inches, an eight-pounder gun; at eight inches, field artillery fully harnessed; at ten inches, a whole army. Where we are now, they could build the Liverpool Custom house, or the Houses of Parliament."

"That's hard to realize," said Johnson; "but just now you were talking of snow, which falls nine days out of ten in these countries; that's clear enough, but where does it come from? As the sea is frozen, it can't give off enough vapour to form the clouds."

"You're quite right, Johnson. I think that most of the rain and snow that falls in these regions comes from the sea water of the temperate zones; a mere drop of moisture from some European river may have risen as vapour, merged into the clouds and at last condensed here, so the water we drink may have come from the rivers of our own land."

At this point the voice of Hatteras, correcting the errors of the route, interrupted the conversation: the mist was getting thicker and making it harder to keep in a straight line. At last, after covering fifteen miles, the little troop stopped at eight in the evening. The weather was still dry; the tent was erected, the stove lit, and they slept in peace.

Hatteras and his companions were certainly favoured by the weather. Throughout the following days their journey was uninterrupted, although the cold became intense and the mercury was still frozen in the thermometer. If there had been any wind not one of the travellers could have borne such a temperature. The doctor could now verify Parry's observations made during his journey to Melville

Island, that any man, suitably clothed, could walk in the open air with impunity if the atmosphere were calm; but if there were the slightest wind, it would inflict a burning pain to the face, and an extremely violent headache, which would soon be followed by death. The doctor was uneasy at the thought that a mere gust of wind would freeze them to the marrow of their bones.

On 5th March he witnessed a phenomenon confined to this latitude; though the sky was perfectly clear and shone with stars, a heavy snow fell without the slightest suggestion of a cloud; the constellations shone through the snowflakes, which drifted down the ice field with graceful regularity. The snow lasted about two hours, and it was over before the doctor could find any explanation of its fall.

The moon's last quarter had waned, and darkness prevailed for seventeen hours of the twenty four; the travellers had to fasten themselves together with a long rope so as not to get out of touch, and it became almost impossible to keep in a straight line.

At last, these courageous men, though buoyed up by an iron will, began to tire; the halts became more frequent, although not an hour was to be wasted, for the food was visibly running out.

Hatteras often checked his position by observations of the moon or stars. As the days went by, and the *Porpoise* seemed no nearer, he asked himself if she really existed, or if the American, deranged by suffering or from hatred to the English, had not meant to drag them to a certain death. He expressed his doubts to the doctor; the latter did not entertain them for a moment, but they made him realize the unfortunate rivalry which had already sprung up between the English and American captains.

"It will be hard to keep those men from quarrelling," he said to himself.

On 14th March, after a journey of sixteen days, the travellers had reached only 82° N.; their strength was exhausted, and they were still a hundred miles from the ship. To add to their sufferings, they had to cut themselves down to quarter rations to keep the dogs fed. Unfortunately

they could not reckon upon killing anything, for all the ammunition they had left consisted of seven charges of powder and six bullets; they had fired at several white foxes and hares, but had not killed any of them.

On Friday, the 15th, however, the doctor had the luck to surprise a seal lying on the ice; he wounded it with several bullets, and as the animal's hole was blocked up it could not escape. It was quite large and Johnson cut it up skilfully but the extreme thinness of this amphibian keeps it from being much use to Europeans, who cannot drink its oil as the Esquimaux do. The doctor courageously tried to swallow the slimy stuff, but he could not manage it. He kept its skin and, though hardly knowing why, loaded it on the sledge.

On the next day, the 16th, some icebergs appeared on the horizon. Did they indicate the vicinity of the coast, or were they merely part of the ice-field? It was hard to say.

Having reached one of the hummocks, they profited by it to dig out a more comfortable shelter than the tent, and after three hours' hard work were able to stretch themselves round the flaming stove.

CHAPTER IV

THE LAST CHARGE OF POWDER

JOHNSON found room in the igloo for the overworked dogs; when the snow falls abundantly, it makes a sort of blanket for them, and preserves their natural heat, but in a dry cold at 40° below zero they would have been frozen. An excellent dog-driver, he tried to feed them with the blackish seal-flesh, which the travellers could not swallow; to his great astonishment they ate it with relish, and he went joyfully to the doctor to tell him about it. The latter was not surprised, for he knew that in the extreme north of America fish forms the principal food of the horses, and what herbivorous horses could eat, omnivorous dogs ought to welcome.

Before going to sleep—though sleep becomes an imperious necessity to men who had marched fifteen miles across the ice—the doctor wished to discuss the position with his companions: “We haven’t yet reached the eighty-second parallel,” he said, “and our food is already beginning to run out.”

“That’s a good reason for not losing an instant,” Hatteras replied. “We must press on, and the strong must drag the weak along.”

“Do you think we’ll find the ship, after all?” asked Bell, worn out in spite of himself by the fatigues of the journey.

“There’s no reason to doubt that,” answered Johnson; “the American’s safety depends on ours.”

To make sure, the doctor again asked Altamont about his ship. The American could speak a little now, though but feebly; he confirmed all the details he had given, and repeated that the ship, stranded on the granite rocks, could not have moved, and that she lay at 120° 15′ W. and 83° 35′ N.

“We can’t doubt what he tells us,” explained the doctor;

"the difficulty isn't to find the *Porpoise*, it's to reach her."

"How much food is left?" asked Hatteras.

"Enough for three days at most," replied the doctor.

"Very well, then, we must get there in three days!" the captain said energetically.

"Indeed we must," continued the doctor; "and if we manage it we shan't have much to complain of, for we've had unusually good weather. We've had no snow for a fortnight, and the sledge slid easily over the hardened ice. If only we had two hundred pounds of food, our good dogs would easily manage to draw them. Well, it's no good wishing."

"Don't you think we might manage to kill something with the little powder we've got left? If only we could get hold of a bear, we'd have enough food for the rest of the journey."

"No doubt!"

"But bears are rare and wary, and besides, just to know how much depends on a shot is enough to confuse the sight and make the hand tremble"

"But you're quite a good shot," said Bell.

"Yes, when the lives of four men don't depend on my skill; but give me a chance and I'll do my best. Tonight we must content ourselves with a few scraps of pemmican, and try to sleep so as to get up early to push on."

A few minutes later they all fell asleep from sheer fatigue. Early on Saturday morning Johnson awoke his companions; the dogs were already harnessed, and they continued their march northward.

The sky was magnificent, the atmosphere extremely clear, and the temperature very low; when the sun appeared above the horizon it formed a long ellipse, the refraction making its horizontal diameter seem twice its vertical diameter. Its cold clear rays fell on the immense frozen plain, but the return of the light, although devoid of heat, was pleasant.

The doctor, gun in hand, went a mile or two away from the others; before starting he had carefully measured out

his ammunition; he had four charges of powder and three bullets, no more. It was very little with which to hunt a bear, often needing ten or twelve shots to kill. The doctor's ambition did not extend to such fearsome game; a few hares or two or three foxes would suffice. But all that day, if he caught sight of one of these animals, either he could not approach it or, deceived by the refraction, he missed. That day cost him one fruitless charge of powder and one bullet.

His companions, who had trembled with hope at the noise, saw him return empty handed. They said nothing, and in the evening they went to sleep as usual, after putting aside two quarter rations destined for the next two days.

The next day the journey seemed still more difficult. They could not walk; they dragged themselves along; the dogs had devoured even the entrails of the seal, and were beginning to gnaw their thongs. Some foxes passed near the sledge, but the doctor, after losing another shot by hunting them, dared not risk his last bullet.

In the evening they halted early; they could not go a step farther, and though their way was lighted by a magnificent aurora borealis they had to stop.

Their last meal, taken on the Sunday evening under the frozen tent, was melancholy. If Heaven did not come to help the poor fellows, they were lost. Hatteras did not speak, Bell no longer even thought, Johnson meditated silently, but the doctor did not yet despair.

Johnson dug a few fox-traps during the night, but as he had no bait he did not much count on their success; he was right, for though he saw the tracks of foxes next morning, not one had been caught. He was coming back bitterly disappointed when he perceived a bear of colossal size, sniffing at the sledge fifty fathoms away. The old sailor thought that Providence had sent him this unexpected quarry; without waking his companions he snatched up the doctor's gun and ran towards it.

Arrived within distance, he took aim; but as he was going to press the trigger he felt his arm tremble; his thick

leather gloves were hindering him. He snatched them off rapidly and seized his gun.

But suddenly he gave a cry of pain. The skin of his fingers, seared by the cold of the barrel, stuck on to it, whilst the gun fell to the ground, and went off with the shock, throwing his last bullet into space.

The doctor ran out at the sound of the explosion. He saw what had happened: the animal running quietly away, and Johnson frantic and forgetful of his own suffering.

"I'm no better than a woman!" he cried. "A child that doesn't know how to bear pain Me—at my age!"

"Come in, Johnson, come in," the doctor told him, "you'll be frozen. Look, your hands have turned white already; come along."

"I don't deserve to be cared for, Dr. Clawbonny. Let me alone!"

"Come on, you obstinate fellow. Come on, or it'll soon be too late"

The doctor dragged the old sailor into the tent and made him put his hands into a pail of cold water, but scarcely had Johnson plunged in his hands than the water froze solid at their mere touch.

"You see," the doctor told him, "it was high time you came in, or I'd have had to amputate them."

Thanks to his care, an hour later all danger had passed, though not without trouble, for constant friction was needed to restore the circulation in the old sailor's fingers. The doctor especially advised him not to go near the stove, as heat would be most injurious.

That morning they were obliged to go without breakfast; there was no pemmican or salt meat left, not a crumb of biscuit; they had not quite half a pound of coffee, and they had to be content with that scalding liquid, before setting out.

"It's all up now!" Bell said to Johnson, with a pitiful accent of despair.

"Have faith in God!" replied the old sailor. "He alone can save us!"

"Oh, that Captain Hatteras!" exclaimed Bell "He got

back from his first expeditions, the madman, but he'll never get back from this, nor we either! We shall never see our country again!"

"Keep your heart up, Bell! I know the captain's rash, but we've got a clever man with us."

"You mean Dr. Clawbonny?"

"That's him!" answered Johnson.

"What can he do here?" asked Bell, shrugging his shoulders. "Can he change ice-blocks into lumps of meat? He can't do miracles!"

"Who knows?" answered the boatswain; "I've got confidence in him."

Bell shook his head and fell into a silence devoid even of thought.

They scarcely went three miles that day, and in the evening they had nothing to eat. The dogs were threatening to devour one another, and the men felt all the agonies of hunger. There was not an animal to be seen. But what if there had? They could not have killed it with their knives.

Johnson fancied he could see a bear following them a mile down wind. "He's watching us," he thought. "He knows we're his prey." But he said nothing to his companions.

In the evening they halted as usual and their supper consisted only of a little coffee; tormented with hunger they could not get an hour's sleep and they were beset by strange and terrible dreams.

When Tuesday morning arrived the poor wretches had not eaten, in a latitude that demands plenty of food, for thirty-six hours. However, spurred on by a superhuman courage and will, they plodded ahead, pushing the sledge which the dogs could no longer haul.

After about two hours they fell exhausted, but Hatteras wished to go farther. As energetic as ever, he prayed and besought his companions to get up, but he was asking the impossible. Then, with Johnson to help him, he cut an igloo out of an iceberg. They seemed to be digging their own grave.

"I don't mind dying of hunger," he said, "but I won't die of cold."

After agonizing toil, the five men crouched down in it, and so the day passed.

That evening, whilst his companions stayed motionless, Johnson had a sort of hallucination and dreamt about gigantic bears.

That word, repeated aloud several times, attracted the doctor's attention. Aroused from his lethargy, he asked Johnson why he kept talking about bears, and what bear he meant.

"The one that's been following us for the last two days," answered Johnson.

"The last two days! You've seen it, then?"

"Yes, he keeps a mile away down wind."

"Why didn't you tell me, Johnson?"

"What would be the good?"

"That's true enough," agreed the doctor. "We haven't even one bullet to send after him."

"Not even a bit of iron, not even a nail," sighed the old sailor.

The doctor fell silent and began to think. Then he said: "You're sure the animal is following us?"

"Yes, Dr. Clawbonny, he's counting on a good meal of human flesh, and he knows we can't get away!"

"Johnson!" exclaimed the doctor, moved by his tones of despair.

"He's certain of his food!" Johnson was getting delirious. "He must be hungry, and I don't know why we're keeping him waiting."

"Johnson, calm down!"

But Johnson was almost frantic, he wanted to go outside. The doctor could hardly restrain him, and if he succeeded it was because of the conviction with which he said: "Tomorrow I'll kill that bear."

"Tomorrow?" repeated Johnson, seeming to wake from a bad dream.

"Tomorrow!"

"You haven't a bullet."

"I'll make one."

"But you haven't any lead!"

"No, but I've got some mercury." The doctor picked up the thermometer, which in the hut marked 50° above zero. He went out, put it on a block of ice, and soon went back to it. The temperature outdoors was 50° below zero. "Now go to sleep and wait until the sunrise," he told the old sailor.

The night passed in all the sufferings of hunger. The doctor and the boatswain were the only ones to temper it with a ray of hope.

Next day, at sunrise, the doctor, followed by Johnson, rushed out and ran to the thermometer. All the mercury had sunk into the bulb, where it had taken the form of a small cylinder. The doctor broke open the instrument, and, with his hands prudently gloved, he extracted a lump of metal, malleable and very hard. It was like a small ingot.

"That's marvellous, Dr. Clawbonny! You're wonderful!"

"No, my friend, I'm only a man who has a good memory and has read widely."

"What do you mean?"

I remember how Captain Ross explains that during his voyage he pierced through a plank an inch thick with a bullet of frozen mercury; if I'd had any oil it would have been almost as good, for he explains, too, that a bullet of oil of sweet almonds, fired against a stake, split it in two, and rebounded to the earth without breaking."

"But that's unbelievable!"

"But it is so, Johnson. This bit of metal that will save our lives; let's leave it in the air until we use it and see if the bear's forsaken us!"

Just then Hatteras came out of the hut; the doctor showed him the piece of metal, and told him his plan; the captain gripped his hand, and they all three began to watch the horizon.

The weather was very clear, and Hatteras, who had gone ahead of his companions, located the bear less than six hundred fathoms away. It was seated on its haunches,

swinging its head tranquilly and enjoying the scent of its unaccustomed guests.

"There he is!" exclaimed the captain.

"Silence," the doctor ordered.

But when the enormous quadruped saw the sportsmen he did not move; he simply looked at them without either fear or anger. But it was plainly going to be hard to get at him.

"There's no question of sportsmanship here," said Hatteras. "We must be careful."

"Yes, for we've only the one shot. We mustn't miss him—if he runs we've lost him, for he's quicker than a hare."

"Well, we must go straight for him," replied Johnson. "We'll be risking our lives, but what does that matter? I'll risk mine."

"No, mine!" exclaimed the doctor.

"Mine!" was the captain's simple reply.

"But isn't your safety more precious to all of us than that of an old fellow like me?" asked Johnson.

"No, Johnson," the captain explained, "let me do it. I won't risk my life any more than I have to; and I may even have to call you to help me!"

"But how do you mean to get near him?" asked the doctor.

"If I were certain of getting him I'd do it, even if he cracked my skull, but when I get near him he might run. He's a wily beast, so we must be more wily still."

"But what are you going to do?"

"Get ten paces from him before he gets suspicious."

"But how?"

"It's dangerous, but quite simple. You've still got the skin of that seal you killed?"

"Yes, it's on the sledge."

"Very well, come back into the igloo, while Johnson stops here and keeps watch."

The boatswain crawled behind a hummock, which hid him completely from the bear. The latter still in the same place, was still swinging his head and sniffing the air.

CHAPTER V

THE SEAL AND THE BEAR

"You know," Hatteras told the doctor, as they went back to the hut, "the Polar bears feed on seals. They watch beside the holes they've made for days on end, and when a seal comes up on the ice, the bear crushes it between its paws. A bear won't be scared by a seal."

"I see your idea," replied the doctor; "it's dangerous."

"It's got a chance, though, and we've got to try it. I'm going to put on the sealskin, and creep over the ice. Load your gun and give it to me."

The doctor had nothing to say, for he would have done the same himself; he went out with two axes for Johnson and himself; then, with the captain, he went over to the sledge.

Hatteras made his toilet as a seal; the skin covered him almost completely. Meanwhile the doctor loaded his gun with the last charge of powder and dropped into its muzzle the lump of mercury, as hard as iron and as heavy as lead. He gave it to Hatteras, who hid it under his sealskin.

"Go over to Johnson now," he told the doctor; "I'm going to wait a few moments to mislead my enemy."

"Good luck, Hatteras!" replied the doctor.

"Don't worry, and, above all, don't show yourself until I fire."

The doctor hurried across to the hummock behind which Johnson was hiding.

"Well?" said the latter.

"We've got to wait. Hatteras is risking his life to save us."

The doctor was anxious; he watched the bear, which now seemed more anxious, as though it scented danger.

A quarter of an hour later, the "seal" crawled over the ice; he had gone round several large blocks so as to make sure of deceiving the bear. He had got within about fifty

paces when it noticed him; it crouched down as though meaning to take him by surprise.

Hatteras imitated a seal's movements so skilfully that if the doctor had not known about him he too would have been taken in.

"That's the idea!" he whispered to Johnson.

The seal, although going towards the bear, did not seem to have noticed it; he appeared to be looking for a crevasse to get back into the sea. The bear meanwhile crept very cautiously over the ice towards him; its glaring eyes showed its eagerness; perhaps it had gone hungry for as much as two months, and now chance had sent it a certain prey.

The "seal" soon arrived within ten paces from his enemy. Suddenly the latter made a great leap; then scared and startled, it stopped three paces from Hatteras. He, throwing off his sealskin, knelt on one knee and aimed at the creature's heart.

The rifle cracked, and the animal collapsed.

"Come on! Come on!" shouted the doctor, and he and Johnson rushed over the ice.

The enormous beast had got up, it was beating the air with one paw, while with the other it had snatched up a handful of snow to staunch its wound.

Hatteras had not recoiled; he was waiting knife in hand. But he had taken a good aim, and fired with a steady hand; before his companions reached him he plunged his knife up to the hilt into the animal's throat. It fell to rise no more.

"Got him!" shouted Johnson.

"Good work, Hatteras!" cried the doctor.

Hatteras looked calmly at the great body and folded his arms.

"Now it's my turn," said Johnson; "it's all very well to kill him, but we mustn't wait till his flesh is frozen hard; neither teeth nor knives could do anything then."

He began by skinning the animal, which was almost as large as an ox; it was nine feet long and six feet in girth, with two enormous fangs three inches long. When he cut it

open he found nothing but water in its stomach, so clearly it had not eaten for a long time; yet it was very fat and probably weighed over 1,500 pounds; he divided it into quarters, each yielding 200 pounds of or so of flesh, and the hunters dragged it to the igloo, not forgetting the animal's heart, which three hours later, was still beating strongly.

The others would gladly have thrown themselves upon the raw meat, but the doctor restrained them, and asked for time to grill it. When he got back into the igloo, he was amazed to find it so cold; going over to the stove, he found it completely out. All that morning's excitement had made Johnson forget to put on any fuel. The doctor tried to light it, but he could not find as much as a spark amongst the cinders, which had already got cold.

"Come, have a bit of patience!" he said; going over to the sledge for the tinder-box, he asked Johnson for the steel with which he could strike a spark. "The fire's gone out," he told him.

"That's my fault," Johnson admitted, but when he looked for the steel in the pocket where he usually kept it, he was surprised not to find it. He felt unsuccessfully in his other pockets; nor when he had got back to the igloo and searched under his blankets was he any more successful.

"Well?" the doctor asked him.

Johnson went back and looked at the others. "Haven't you got it, Dr. Clawbonny?" he asked.

"No, Johnson."

"Nor you, Captain?"

"No," answered Hatteras.

"You've always had it," said the doctor.

"Well, I haven't got it now," Johnson grew pale.

"You haven't got it?" the doctor shuddered. He realized the appalling consequences of such a loss. "Try to find it, Johnson," he said.

Johnson ran to the iceberg from which he had watched the hunt, and then to the place where he had cut up the bear, but he could find nothing. He ran despairingly back. Hatteras did not utter even a word of reproach.

"That's bad luck," commented the doctor.

"Yes, agreed Hatteras "We haven't any instrument, not even a telescope, from which we could get a lens "

"I know," said the doctor, "and that's very bad luck, for the sun's rays would be quite strong enough to light the tinder "

"Well," Hatteras decided, " we must appease our hunger with this raw meat, then get on and try to reach the ship "

"Yes," the doctor was plunged in thought "It's just possible—why not? I might try——

"What have you got in mind? Hatteras asked him

"I've got an idea "

"You've got an idea, exclaimed Johnson, "then we're saved "

"But will it work? pondered the doctor, that's the question "

"What is it? asked Hatteras

"We haven't got a lens, so we must make one

"How? asked Johnson

"With a bit of ice cut into shape

"What? Do you think——

"Why not? We want to concentrate the sun's rays on a focus and ice may do that as well as the finest crystal But I must have a bit of fresh water ice

"Unless I'm wrong, Johnson pointed to a hummock a little way off, "that blackish look and that green colour seem to show——"

"You're quite right, come my friends Johnson bring your axe "

The three men went to the block which really consisted of fresh water ice The doctor had a piece broken off about a foot round, and began hacking it roughly into shape with his axe, then he smoothed the surface with his knife, and finished it by polishing it with his hand Soon he had got a lens as transparent as if it had been the finest crystal Then he went back to the igloo, got a length of tinder, and began his experiment

The sun was shining fairly brightly, the doctor exposed his ice lens to its rays, and concentrated them on the tinder In a few seconds it had caught alight

"Hurrah for Dr. Clawbonny!" shouted Johnson, scarcely able to contain his joy; he danced up and down like a madman. The doctor went back into the igloo; a few minutes later the fire was roaring in the stove, and soon a savoury smell of frying aroused Bell from his torpor.

It may well be imagined what justice was done to the meal, though the doctor advised his companions to moderate their appetite, and himself set the example.

"Today's our lucky day," he said, "we've got enough provisions for the rest of the journey. However, we mustn't let these delights lull us to sleep; we'd better be on our way again."

"We can't be more than forty-eight hours from the *Porpoise*," said Altamont, who by now could almost speak clearly.

"I hope," laughed the doctor, "that we'll find something there to light the fire with."

"Oh, there'll be plenty of everything," Altamont assured him.

"Because though my lens is quite a good one, it's no use when the sun doesn't shine, and that's often enough at four degrees from the Pole!"

• "Yes," Altamont agreed with a sigh; "less than four degrees, that's where my ship went, where no other vessel had ever gone."

"Come, let's get away," Hatteras gave his orders curtly.

"Yes, we're all ready," answered the doctor, looking uneasily at the two captains.

The travellers' strength was soon restored; the dogs shared freely in the bear's remains, and soon they were once more rapidly on their way towards the north. During the journey the doctor wished to ascertain from Altamont his reasons for going so far, but he only got evasive answers.

"We've got two men to look out for," he whispered to the boatswain.

"Yes," agreed Johnson.

"Hatteras never speaks to the American, and he doesn't seem inclined to be very grateful. It's lucky I'm here."

"I don't much care for that Yankee's face now he's got better," replied Johnson.

"Unless I'm mistaken, he's got an inkling of Hatteras's plan," the doctor answered.

"Do you think this foreigner's got the same idea?" asked Johnson.

"Who knows? The Americans are tough and daring; what an Englishman wants to do an American might try!"

"You think that Altamont—"

"I don't think anything," answered the doctor; "but his vessel's so near the Pole, it gives us something to think about."

"But he said he was drifted there against his will."

"He says so, but I thought he was smiling ironically."

"The devil! Dr Clawbonny, a rivalry between two such men would be very unlucky."

"Heaven send I'm mistaken, or things may get difficult."

"I hope Altamont won't forget we saved his life."

"Isn't it his turn to save ours? Of course he wouldn't be here if it wasn't for us; but without his ship and her cargo what should we do?"

"Well, Dr. Clawbonny, you're here, and with your help I hope it'll end happily."

"I hope so too, Johnson."

The journey continued without further incident; they had plenty of bear's flesh, and got excellent meals; thanks to the doctor, a certain good-humour reigned amongst them: this worthy man always found something worth talking about. His own health was still good; in spite of his fatigues and privations, he had not got much thinner; his Liverpool friends would easily have recognized him, especially by his good and equable temper.

On the morning of Saturday, the nature of the immense ice-plain, the piled-up hummocks, showed that the ice-fields had undergone great pressure; it was evident that some unknown continent or some new island had caused the confusion by narrowing the leads. Larger and more frequent blocks of fresh-water ice indicated the vicinity of the coast. Some unknown land must exist not very far away, and the

doctor burnt with the desire to enrich the maps of the boreal hemisphere. The pleasure of tracing out new coasts with a pencil and paper can scarcely be imagined; this was Clawbonny's dearest wish, as that of Hatteras was to set foot on the Pole, and he rejoiced in the thought of baptising the seas, straits, bays, and sinuous coastlines of these new continents. Needless to say, in his nomenclature he did not forget his companions, nor his friends, nor Her Gracious Majesty, nor the Royal Family, and he foresaw a certain Cape Clawbonny with legitimate satisfaction. These thoughts kept him busy all day.

In the evening, camp was pitched as usual, and each took it in turn to watch while his companions slept. Next day was Sunday, and after a good breakfast of bear paws, which were excellent, the travellers went northwards, keeping a little to the west, the route became more difficult, but none the less they pressed on quickly.

Altamont, from his place on the sledge, watched the horizon feverishly, while his companions were a prey to involuntary anxiety. The last observations of the sun had given latitude exactly $83^{\circ} 35'$, longitude $120^{\circ} 15'$, it was the position assigned to the American vessel, the question of life or death was to be settled during the day.

At last, at two o'clock in the afternoon, Altamont stood upright and halted the party with a shout, pointing to a white mass, which any other would have confused with the surrounding icebergs, he cried loudly

"The *Porpoise*!"

CHAPTER VI

THE PORPOISE

TWENTY-FOURTH of March was that great festival Palm Sunday, when all the Catholic peoples of Europe decorate their streets with flowers, when the church-bells ring and the air is filled with fragrance. But in this desolation, what gloom! What silence! A bitter cutting wind, and not even a blade of grass: yet Palm Sunday was a day of rejoicing even here, for at last the castaways were about to find the supplies without which they must have perished.

They pressed on more quickly; the dogs pulled harder, Duk barked with satisfaction, and they soon reached the American ship.

The *Porpoise* was completely buried under the snow; she had lost her masts and yards and rigging, which had been smashed when she was wrecked. Hemmed in by a bed of rocks themselves completely invisible, she had been thrown over on her side by the violence of the shock; her hull was ripped open, and she seemed to be uninhabitable.

This the captain, Dr. Clawbonny, and Johnson realized when, with much difficulty, they got inside the ship. They had to clear away fifteen feet of ice before they reached the provisions.

"We've got plenty of food and fuel," said Johnson, "but we can't live in that hulk."

"Then we must make an igloo," Hatteras decided; "we'll settle down on land as best we can."

"Yes," said the doctor, "but there's no need to hurry, and we'd better do it well while we're about it. We can stay in the ship for the time being, and build a house solid enough to protect us from the cold and the wild beasts. I'll be the architect, and you'll soon see what I can do!"

"I don't doubt your skill, Dr. Clawbonny," Johnson answered; "let's settle ourselves here as best we can, and

make a list of the ship's contents; unfortunately, I can't see the long-boat or a canoe, and the remains of the ship are too battered to build another vessel with."

"Who knows?" answered the doctor. "With time and trouble we can do much. But it's not a question of sailing just now, only of making a good dwelling. One thing at a time."

"Yes," agreed Hatteras, "we'll start at the beginning."

They left the ship and returned to the sledge to explain their plans to their companions. Bell was ready to set to work at once; the American shook his head when he heard that nothing could be done with his vessel. But, as any sort of argument would have been out of place, they kept to the plan of taking refuge on the *Porpoise*, and of constructing a large building on the coast.

At four in the afternoon they settled down as well as they could below deck; Bell made a sort of horizontal flooring with the remains of the masts and spars; on this they placed the frozen hammocks, which the heat of the stove soon restored to their natural state. Altamont, leaning on the doctor, was able to get to his corner without much difficulty. When he set foot on his ship he gave a sigh of satisfaction, and this did not please the boatswain.

"He feels he's at home now!" he thought.

The remainder of the day was consecrated to rest. The weather threatened to change under the influence of the west wind; the thermometer outside indicated 22°. The *Porpoise* was situated beyond the Pole of greatest cold, in a latitude relatively less frigid, though nearer to the north. They finished the rest of the bear meat with some biscuits and tea from the ship's stores; then fatigue took possession of them, and they slept deeply.

Next morning Hatteras and his companions woke rather late. No longer uneasy about the morrow, rested and having slept more peacefully, they thought only of settling in as comfortably as they could. They regarded themselves as colonists arrived at their destination, and had only to think about making the future tolerable.

"Well," said the doctor, stretching himself, "it's some-

thing to know where we can sleep at night, and what we can eat next day."

"We'd better start by making a list of the ship's contents," answered Johnson.

The *Porpoise* had been splendidly equipped and provisioned for a long voyage. The inventory showed plenty of food. 6150 lb. of flour, suet, and raisins for puddings; 2000 lb. of salted beef and pork; 1500 lb. of pemmican; 700 lb. of sugar and as much of chocolate; a case and a half of tea, weighing 96 lb.; 500 lb. of rice; several barrels of preserved fruits and vegetables; limejuice and other antiscorbutics in abundance; 300 gallons of rum and brandy. The magazines contained a large quantity of powder, bullets, and lead; there was plenty of coal and wood. The doctor took especial care of the mathematical instruments, and of a large Bunsen battery intended for electrical experiments. The provisions were sufficient to last five men two years on full rations. All fear of death from cold or hunger had disappeared.

"Now our needs are provided for," the doctor reminded the captain, "there is nothing to prevent your pushing on to the Pole."

"To the Pole!" Hatteras trembled with excitement.

"Certainly," continued the doctor; "during the summer months what's to prevent you taking an exploring party across country?"

"Overland, yes; but what about crossing the sea?"

"Can't we build a boat with the boards of the *Porpoise*?"

"An American boat, isn't it?" Hatteras was disdainful. "Commanded by that American."

The doctor understood the captain's repugnance, and let the subject drop.

"Now that we know what supplies we have," he continued, "we must build storehouses for them, and a house for ourselves. There are plenty of materials, and we can easily make ourselves comfortable. I hope, Bell," the doctor added, turning to the carpenter, "that you're going to distinguish yourself; and I may be able to give you a little advice."

"I'm quite ready, Dr. Clawbonny," answered Bell; "if necessary I could build a whole town with these ice-blocks."

"Oh, we don't want all that! We must emulate the Hudson Bay Company's agents: they built forts which sheltered them from animals and Indians, and that's all we want. On one side we must build the house, and on the other the stores, with a protective wall and two bastions to cover us. I will try to remember what I know about fortification."

"I don't doubt we shall make something fine with you to guide us," said Johnson.

"First we must go and choose the site," the doctor pointed out. "A good engineer always surveys the ground. Will you come with us, Hatteras?"

"I leave it to you, doctor," answered the captain. "While you are away I'm going to climb the hill."

Altamont was still too weak to share in the work, and he was left on his ship while the Englishmen set foot on land. The weather was stormy and thick; at noon the thermometer marked 11° below zero; but in the absence of any wind the temperature was bearable.

To judge from the aspect of the coast, a large frozen sea seemed to extend out of sight westward; it was bounded on the east by a curving shore, penetrated by deep estuaries, and rising abruptly at about 200 yards from the beach; it thus formed a vast bay, bristling with the dangerous rocks on which the *Porpoise* had been wrecked; in the distance rose a hill which the doctor estimated at 500 feet high.

Towards the north a promontory ran down into the sea after curving round part of the bay. A moderate-sized island emerged from the ice-field about three miles from the coast, so that, but for the difficulty of entering it, the roadstead would have formed a well-sheltered anchorage. In a bend of the coast there was also a little port, easy of access by ships, if ever the thaw should clear that part of the Arctic Ocean – and, according to Belcher and Penny, all that sea ought to be open during the summer months.

On the side of the hill the doctor noticed a sort of rounded plateau about 200 feet across; on three of its

sides it overlooked the bay, the fourth was closed in by a wall topped by a high peak; it could be reached only by steps cut out of the ice. This seemed a likely place to build a solid construction, and it could easily be fortified; Nature had prepared the ground and all that was necessary now was to profit by her work.

The doctor, Bell, and Johnson reached this table-land by cutting steps into the ice with their axes; they found it perfectly level. The doctor, after making certain of the site's excellence, decided to clear away the ten feet of hardened snow which covered it; he would have to give his house and stores a solid foundation.

They worked hard all Monday, Tuesday and Wednesday and at last the ground appeared; it consisted of a very hard, close-grained granite, with edges sharp as glass; their pick-axes sent felspar crystals and garnets flying into the air.

The doctor then planned his snow-house; it was to be forty feet long, twenty wide, and ten high, and to be divided into the only three rooms they needed. The kitchen was on the left, the bedroom on the right, with the living-room between.

For five days they worked assiduously. They had plenty of material; the ice-walls had to be made thick enough to resist the thaws, for it would not do to risk finding themselves shelterless even in summer. As the house rose, it began to take shape: its four windows, two for the living-room, one for the kitchen, and one for the bedroom, were made not of glass but of slabs of transparent ice, in the Esquimaux style, and the light that came through them was as clear as though they had been plate glass.

In front of the living-room, between the two windows, was a long covered passage leading into the house; a solid door taken from a cabin in the *Porpoise* closed it hermetically.

When the house was finished, the doctor was enchanted with his work. It would be hard to say what sort of architecture it belonged to; though he would have preferred Anglo-Saxon Gothic, solidity was his principal object. So he limited himself to placing strong buttresses against the

front wall and a steep roof sloping down from the granite cliff-face, which also served to support the chimneys of the stove.

The adventurers next fitted up its interior. They took the bunks from the *Porpoise* into the bedroom, and arranged them in a circle round a vast stove. Forms, chairs, armchairs, tables and cupboards were placed in the living-room, which served also as dining-room; finally the kitchen was equipped with the stores from the vessel and with the cooking utensils. Sails spread over the floor served for carpets, and were also hung in the doorways instead of doors.

The walls of the house were about five feet thick, and the window embrasures looked like loop-holes.

All this was very solid; what more could one ask? If they had listened to the doctor, what could they not have done with all that snow and ice! He imagined countless projects which he could never realize, and he amused his companions with them as they worked. Besides, bibliophile as he was, he had read a rare book by Kraft: *Detailed description of the ice-house built at St. Petersburg in January 1740, and of all its contents*. The memory excited him and he told his companions all about the marvels of this ice-built palace.

"What they did at . . . Petersburg," he asked them, "couldn't we do here? What haven't we got that they had? Nothing, not even imagination."

"It was very fine, then?" asked Johnson.

"It was like fairyland. It was built by order of the Empress Anne, and in it she had the marriage performed of one of her court jesters; it was about as large as ours, but along its front were six cannons made of ice; they were often fired with powder and shot, but they never burst; there were also mortars made to take six-pound shells, so here we could place some formidable artillery; the metal isn't far away—indeed, it falls from the sky.

"But the most tasteful and artistic part of the palace was its façade, which was decorated with beautiful ice-statues; all along the terrace steps were vases of flowers and orange-trees, all cut from ice; on the right stood an

enormous elephant, whose trunk gushed water all day and flaming naphtha all night. We could make a complete menagerie here."

"Oh, as to animals," answered Johnson, "we'll get plenty of them and they'll be none the worse for not being made of ice."

"Well," said the warlike doctor, "we can easily defend ourselves against them; but to get back to my ice-house. In the interior there were tables, dressing-tables, mirrors, candelabra, candlesticks, beds, mattresses, pillows, curtains, clocks, chairs, playing-cards, cupboards completely fitted up, a whole houseful of furniture, all chiselled, gouged, sculptured out of the ice."

"It was a real palace, then?" asked Bell.

"Yes, a splendid palace, worthy of a sovereign. Oh, ice! Providence did well to invent it because it can provide such marvels and make poor shipwrecked fellows comfortable!"

The furnishing of the house took till 31st March. That was Easter Sunday, and was consecrated to rest; they spent it in the parlour, where Divine Service was read, and they all appreciated the comforts of their snow-house.

Next day they began to build their store-houses and the powder magazine; it took about a week, including the transfer of the goods from the *Porpoise*. This was difficult, for the temperature was too low to allow them to work long at a time. At last, on 8th April, the food, fuel, and ammunition were on terra firma and safely sheltered the store houses were placed to the north and the powder-magazines to the south of the table-land, about sixty feet from each end of the house; near the store a sort of kennel was built for the Greenland dogs, and the doctor bestowed on it the title of the "dogs' palace". Duk shared the communal dwelling.

Then the doctor set about defending it. Under his direction the table land was surrounded by an ice fortification, which protected it against any risk of invasion. While he was building his defences, he recalled Sterne's Uncle Toby, whose sweet temper and kindly disposition he shared.

He had to calculate it out very carefully, but the work was so easy in the soft snow that he was able to make his wall seven feet thick; as the table land overlooked the bay he did not need to build any exterior counterscarp or glacis; after following the curve of the plateau, the snow parapet started from the rock on both sides of the house. The fortifications were complete about 15th April, and the doctor seemed very proud of his work. This stronghold could indeed hold out for a long time, had it been attacked by Esquimaux, but no such enemies were to be feared at these latitudes. When Hatteras went to study the lay of the land, he never saw the slightest suggestion of the Greenland tribes; the refugees from the *Porpoise* and the *Forward* seemed to have been the first to tread this unknown soil.

But though human enemies need not be feared, animals might be formidable, and the fortress, thus defended, would shelter its little garrison from their attacks.

CHAPTER VII

CARTOGRAPHICAL CONTROVERSY

WHILE they were getting ready for the winter, Altamont had regained his health and strength; he could even help unload the ship. His vigorous constitution had won the day, and once more he became the robust and confident citizen of the United States; an energetic and intelligent man, endowed with a resolute character. Bold and adventurous, prepared for anything, he was a native of New York, and had "navigated from childhood", as he told his new companions; his ship, the *Porpoise*, had been equipped and sent to sea by a society of rich merchants of the Union, headed by the famous Mr. Grinnell.

Though Altamont and Hatteras had much in common they were not at all in sympathy. The American made a greater show of candour than Hatteras, but did not seem so sincere; he was more companionable, but not so loyal; his open character did not inspire so much confidence as the captain's more sombre temperament. The latter said what he had to say and then withdrew into himself; the other, whilst talking at great length, ended by saying nothing. The doctor formed his opinion of the American's character, and had forebodings of enmity, if not hatred, between the two captains.

And yet of these two commanders, only one could take command. Hatteras had the right of priority and might over Altamont; but if the one was at the head of his men, the other was on his own ship.

Either by policy or instinct Altamont felt drawn towards the doctor; he owed him his life, but what he felt towards the worthy man was friendship rather than gratitude. That was the result of Clawbonny's character; friends grew up around him like corn in the sun. Some people are said to

get up at five in the morning simply to make enemies; if the doctor had got up at four he would have failed.

He tried to profit by Altamont's friendship so as to know the true reason for his expedition in the Polar Seas. But the American, as usual, talked at great length without saying anything, and vaguely mentioned the North-West Passage. The doctor suspected that he had some other motive, the very one that Hatteras feared. He resolved never to broach the subject before the two adversaries, but he could not always keep it from cropping up. The simplest talk went astray for all he could do, and a word might arouse instincts of rivalry.

What he feared at last took place. When the house was complete the doctor decided to inaugurate it by a splendid feast; he wanted to make their life seem a little more European. Bell had just killed some ptarmigan and a white hare, the first harbinger of spring.

This feast took place on 14th April; the weather was fine and very dry, but the cold could not penetrate into the snow-house among the roaring stoves. They dined well; the fresh meat made an agreeable change after the pemmican and salt beef; a marvellous pudding made by the doctor received an ovation, everyone asking for more; the learned chef, apron round waist, and knife in belt, would not have dishonoured the kitchens of the Lord High Chancellor of England.

At dessert spirits were served. The American was no teetotaller and the four Englishmen, though normally sober, saw no reason for refusing a glass of gin or brandy; the doctor, therefore, prescribed a course of toasts. When that of the Union was proposed, Hatteras simply kept silent.

It was then that the doctor raised an interesting point: "Now we've crossed the icebergs and ice-fields and straits, and we've got so far, there's something else for us to do. I suggest that we give names to this hospitable land, where we've found salvation and rest; all the navigators and the world's explorers have the tradition of naming the places they discover. and there isn't one of them who wouldn't

have done so here. When we get home we must take, along with the hydrographic configuration of the coast, the names of its outstanding capes and bays and promontories and points."

"That's well said," exclaimed Johnson. "Besides, when we can call all these lands by their own names that will make things seem more settled, and we shan't feel we're abandoned on an unknown shore."

"Besides," added Bell, "it'll make orders easier to give and carry out when we can call places by their names; if we have to separate while we're hunting or on some other expedition, there'll be nothing like knowing the name of a place for getting back to it."

"Well," said the doctor, "as we're all agreed, let's think out what names to give then and not forget our country or our friends. When I consult a map nothing gives me greater pleasure than seeing the name of a countryman at the point of a cape, on the coast of some island, or in the middle of a sea. It's like bringing friendship into geography."

"You're quite right, Doctor," the American answered; "and the way you put things makes it seem better still."

"Well," replied the doctor, "let's begin at the beginning."

Hatteras had not yet taken part in the conversation, but had sat wrapped in thought. But when he saw his companions looking at him, he rose and said: "Unless anyone has anything better to suggest and unless anybody contradicts me"—here he glanced at Altamont—"it seems to me that we ought to give to our habitation the name of its skilful architect, the best man among us, and call it 'Doctor's House'."

"That's it!" said Bell. "Doctor's House."

"Fine!" exclaimed Johnson.

"It couldn't be better!" replied Altamont. "Three cheers for Dr. Clawbonny!"

The doctor's health was drunk with three times three, and Duk barked in sympathy.

"Very well then," continued Hatteras, "that will do until we can find some new land to call after him."

"Ah!" sighed old Johnson. "If the terrestrial paradise needed a name, Dr. Clawbonny's would suit it splendidly."

The doctor, deeply moved, protested out of modesty. But he was overruled and it was well and truly carried that their fine dinner had been enjoyed in the Doctor's House living-room, after being cooked in the Doctor's House kitchen, before they all went off cheerfully to sleep in the Doctor's House bedroom.

"Now," suggested the doctor, "let's get on with the more important features we have discovered."

"There's the immense sea which surrounds us," Hatteras pointed out, "and which no ship has yet furrowed."

"No ship?" exclaimed Altamont. "I don't think you ought to forget the *Porpoise*! She didn't come by land, you know," he added half-jokingly.

"Anyone might think she had," replied Hatteras, "to see her afloat on those rocks."

"Really, Hatteras," protested Altamont in tones of annoyance. "Isn't that as good as being blown up into the air like the *Forward*?"

Hatteras was going to give a sharp answer, when the doctor interfered: "Friends," he said, "we weren't talking about ships, but about a new sea."

"It isn't new," Altamont pointed out; "its name is on all the maps. It is called the Arctic Ocean, and I don't see any point in changing its name unless it turns out to be a strait or a gulf; then we can decide about it."

"Very well," Hatteras assented.

"Now that's agreed upon," said the doctor, almost sorry at having raised the question so likely to arouse national rivalries.

"Now about the land we're on," continued Hatteras, "I don't think its name appears even on the most recent maps."

As he spoke he was looking at Altamont, who stared him in the face and answered: "You're wrong again, Hatteras."

"Wrong? What, this unknown land, this new country . . ."

"Yes," the American replied calmly, "it's already got a name."

Hatteras was silent; his lips quivered.

"And what is its name?" asked the doctor, rather taken aback by the American's assertion.

"My dear Clawbonny," Altamont told him, "it's the custom, not to say the right, of any explorer to name the land he's the first to discover. It seems to me that here I certainly had the right——"

"But——" put in Johnson, not greatly pleased by the American's coolness.

"It would be difficult to pretend that the *Porpoise* wasn't stranded on this coast, even granting that she came by land," said Altamont, looking at Hatteras.

"I can't agree that you have any right to name it under the circumstances. You did not discover it, I presume. And if it hadn't been for us, where would you be, sir, you who are laying down the law? Twenty feet beneath the snow!"

"And but for me and my ship," snapped the American, "where would you be? Dead of hunger and cold!"

"Come," said the doctor, trying to make peace, "do please be calm; there must be some way of settling it. Just listen to me"

"This gentleman may name all the other lands he discovers," said Altamont, looking at Hatteras, "but this continent belongs to me! I will not even let it bear two names like Grinnell Land, which is also called Prince Albert's Land, because an American and an Englishman discovered it almost at once. But this is different; my rights of priority are incontestable. No ship before mine has ever touched here. No human being, before me, has ever set foot on this continent; so I've given it a name, and that name it will keep."

"And what is that name?" asked the doctor.

"New America," answered Altamont.

The fingers of Hatteras tightened on the table, but with a violent effort he restrained his anger.

"Can you prove that an Englishman set foot on this soil before an American?" Altamont continued.

Johnson and Bell said nothing, though they were no less annoyed than their captain by Altamont's manner. After a few minutes of painful silence the doctor spoke again.

"My friends," said he, "the first of all human laws is the law of justice; it sums up all others. Let us be fair and not carried away by ill-feeling. The priority of Altamont seems indisputable and we cannot deny it. We'll get our own back later and England will have a good share in future discoveries. Let's leave the name of New America on this continent. But I suppose when Altamont named it he did not settle the names of its bays, capes, and headlands, and I don't see why we should not call this inlet 'Victoria Bay'."

"Nor I," added Altamont, "so long as we call yonder headland 'Cape Washington'."

Hatteras was almost beside himself. "You might have chosen a name less offensive to English ears, sir," he snapped.

"But none dearer to American ears," Altamont replied proudly.

"Come, come!" protested the doctor, who had begun to find it hard to keep the peace. "Don't let's argue about that. An American may well be proud of his great men! Let us honour greatness wherever it occurs, and now that Altamont has made his choice, we'll make ours. If our captain——"

"Doctor," interrupted Hatteras, "as the land is American, I do not wish my name to be associated with it."

"That decision is irrevocable?" asked the doctor.

"Quite," Hatteras replied.

The doctor did not insist. "Well," he said, turning to the old sailor and the carpenter, "let's leave some record of our visit here. I suggest we call that island we can see three miles out Johnson Island, in honour of our boatswain."

"Oh, Dr. Clawbonny!" said Johnson, rather confused.

"And that mountain to the west we'll call Bell Mount, if our carpenter agrees."

"It's too much of an honour for me," Bell answered.

"It's only right," said the doctor.

"Nothing could be better," agreed Altamont.

"Now we must christen our fort," continued the doctor, "and don't let's argue about that; it is neither to Her Gracious Majesty Queen Victoria nor to President Washington that we owe our present refuge, but to God, who, by bringing us together, has saved us all. Let's call it 'Fort Providence'."

"A splendid name," exclaimed Altamont.

"Fort Providence," Johnson repeated; "that will sound well! When we come back from our expedition to the north, we shall pass Cape Washington to get to Victoria Bay, then push on to Fort Providence, where we shall find rest and shelter in Doctor's House."

"That's settled, then," said the doctor. "Later on, when we make further discoveries, we shall have to find other names to give which I hope won't cause any disagreement. For here, my friends, we must help and befriend one another; on this stretch of coast, we represent all mankind. Don't let us give ourselves up to the detestable passions which plague society; let's be united so as to be strong and unshaken against adversity. Who knows what dangers Heaven has still in store for us before we get back to our country? Let us five be as one, and lay aside motiveless rivalries which are more unreasonable here than anywhere else. You understand me, Altamont? And you, Hatteras?"

The two men did not answer, but the doctor acted as though they had. Then they changed the subject, and talked about the hunts that were to be organized to renew and vary their stock of food, for with the spring, hares, partridges, and even foxes and bears, would return. They decided to spend the first favourable day in exploring New America.

CHAPTER VIII

TO THE NORTH OF VICTORIA BAY

THE next day, at dawn, the doctor climbed the steep granite wall of rocks against which Doctor's House was built; it ended abruptly in a sort of truncated cone. With some difficulty he reached the summit, whence his view extended over a vast stretch of contorted rock, apparently formed by volcanic action; an immense white sheet covered land and sea, so that the one was indistinguishable from the other.

When he realized that this was the highest point in the neighbourhood he had an idea which would not have surprised anyone who knew him. He pondered over it as he went down to the snow house, where he explained it to his companions.

"I've just thought that we might build a lighthouse on the top of that cone just above our heads," he said to them.

"A lighthouse?" they exclaimed.

"Yes; it would be doubly useful; it would guide us at night when we come back from our distant journeys, and it would light us up during the winter."

"It would certainly be very useful," said Altamont, "but how can you manage it?"

"With one of the ship's lights from the *Porpoise*."

"Agreed; but what can you feed it with? Seal-oil?"

"No; that wouldn't give enough light, it would hardly pierce through the fog."

"Shall you make some gas out of our coal?"

"No, that wouldn't be strong enough either, and it would be a mistake to make inroads on our fuel."

"Then," said Altamont, "I don't see——"

"As for me," answered Johnson, "since the mercury bullet, the ice-lens, and Fort Providence, I think Dr. Clawbonny's capable of anything."

"Well," continued Altamont, "what sort of a lighthouse are you going to use?"

"An electric one, that's all."

"An electric light?"

"Of course; haven't you got a Bunsen battery in perfect condition on the *Porpoise*?"

"Yes," answered the American.

"You must have brought it to make experiments with, for it's all complete, the insulated wires, the acids and everything it needs. We can easily get electric light from that. We shall see better, and it won't cost us anything."

"That's a splendid idea!" cried Johnson, "and the less time we lose——"

"Well, the materials are there, and it will only take us an hour to raise a column of ice ten feet high; that'll be quite enough."

The doctor went out, and his companions followed him to the summit of the cone; the column was soon piled up, and crowned by one of the ship's lanterns

Then the doctor led the conducting wires from the battery, which he put inside the snow-house so that the heat of the stoves would keep it from freezing, up to the lantern of the lighthouse.

The work was soon complete and they waited till sunset to see the effect. Then two pieces of carbon rod, placed in the lantern at the proper distance, were gradually brought closer together, and an intense light, which the wind could neither dim nor extinguish, sprang from the lantern. It was marvellous to see these rays, whose glory rivalled the whiteness of the plain, and which made all the projections around it visible by their shadow.

Johnson clapped his hands. "Dr. Clawbonny's making sunshine now," he said.

"One must know how to do a little of everything," the doctor replied modestly.

The cold put an end to their admiration, and they all went and wrapped themselves up in their blankets.

Then their life became regularly organized. From 15th to 20th April the weather was very uncertain; the tem-

perature fell suddenly to 20° and conditions kept changing: sometimes it snowed in gusts, sometimes the wind was so cold and dry that it was impossible to move out a step without proper precautions. But on the Saturday the wind fell and made travel possible, so they decided to devote that day to hunting to renew their stock of food.

At daybreak, Altamont, the doctor, and Bell, each armed with a double-barrelled gun, plenty of ammunition, an axe, and a snow-knife, in case they had to shelter, set out under a clouded sky. While they were away, Hatteras was to explore the coast. The doctor took care to set the light-house at work; its rays almost rivalled the sunshine, for the electric light, equal to that of 3000 candles or 300 gas jets, is the only one that can bear this comparison.

The air was cold, dry and still, and the sportsmen made for Cape Washington; the frozen snow was easy to walk upon. In half an hour they had covered three miles between the Cape and Fort Providence, while Duk gambolled around them.

The coast trended eastwards, and the high summits of Victoria Bay tended to get lower towards the north. That suggested that New America might be only an island, but there was no question of verifying this. As the sportsmen hurried along the sea-coast, they found no traces of any habitation, not even a hut.

During the first three hours they made about fifteen miles and did not stop to take a meal; but their hunt threatened to be fruitless: they scarcely saw the tracks of a hare, a fox, or a wolf. However, a few snow-birds fluttering here and there announced the return of spring, and with it that of the Arctic animals.

The three were forced to go inland to skirt the rocky peaks and the deep ravines which crowned Bell Mount, but after some delays they regained the coast, where the ice-sheets were not yet broken up. Far from it, indeed: the sea was as frozen as ever; but the tracks of seals announced the first visits of these amphibians, who had come up to breathe on the surface of the ice-field. Their large foot-

marks and the newly made holes in the ice showed that several of them had recently come ashore. As the doctor explained, these animals are very fond of the sunshine, and stretch themselves on the shore to lie in its pleasant heat.

"Let's make a careful note of this place," he said; "it's quite possible that when once the summer is come we'll find seals here by the hundred; they are easy to get at in these lonely spots. But we must take care not to frighten them, or they'll vanish as though by magic and return no more; inexperienced fishermen have often attacked them in a rush with loud shouts and cries, and in that way they've lost their cargoes."

"Do they hunt them simply for their skins and oil?" asked Bell.

"The Europeans, yes; but the Esquimaux eat them; they live on them, and the lumps of seal meat, mixed up with blood and grease, are not at all appetizing. But still, there's always ways of doing things, and I'll undertake to get you some fine cutlets which, once you're used to the colour, you won't turn your noses up at."

"We'll see how you do it," Bell replied. "And I'll undertake to eat as much seal-meat as you like, Dr. Clawbonny."

"You mean as much as *you* like, Bell. But you would never equal the voracity of a Greenlander, who can gulp down from ten to fifteen pounds of seal-meat in a day.

"Fifteen pounds!" cried Bell. "What stomachs!"

"Polar stomachs," answered the doctor; "prodigious stomachs which expand at will, and, I may add, contract in the same way, for they can bear scarcity as easily as abundance. At the beginning of his dinner an Esquimaux is lean; at the end of it he's so fat you can hardly recognize him. It's certainly true that his dinner often lasts a whole day."

"Isn't it true," asked Altamont, "that such voracity is peculiar to the inhabitants of cold countries?"

"I think it is," the doctor answered; "in the Arctic you must eat a great deal; it's one of the conditions not only of strength but of mere existence. The Hudson Bay Company

gives each of its men eight pounds of meat, twelve pounds of fish, or two pounds of pemmican a day."

"That's good living," commented Bell.

"It isn't as much as you might think, my friend, and an Indian stuffed like that wouldn't do as much work as an Englishman fed on his pound of beef and his pint of beer."

"Then, Dr. Clawbonny, it's all for the best."

"Yes, it is; but still an Esquimau's meal might really surprise us. When Sir John Ross was in Boothia Land he was always astonished at the appetite of the guides; he relates somewhere that two men—only two, mind you—ate in morning a whole quarter of a musk-ox they cut the meat into long strips, which they stuffed in their gullets; then after cutting off the part which their mouths were too full to hold, they passed it on to one another. Well, these gluttons, while strips of meat hung to the ground, swallowed them little by little—like a boa-constrictor digesting a bull, and like him they were sprawled out at full length!"

"Whew!" exclaimed Bell. "What disgusting brutes!"

"Everyone's got his own way of dining," the American replied philosophically.

"And a good thing too," replied the doctor.

"Well," said Altamont, "as eating is so important in these latitudes, I'm not surprised that in the records of Arctic voyages they're always talking about their meals."

"Yes," the doctor replied, "I've noticed that too; it's not only because they have to have so much food, but also because it's so hard to get."

"Still," Altamont commented, "if I remember rightly, even in the coldest parts of Norway the peasants don't need to eat so much; some preparation of milk, eggs, and birch-bark bread, sometimes a little salmon, and never any meat, and yet they're good, hearty fellows."

"That depends on their constitution," the doctor pointed out, "and I can't possibly explain it. However, I believe that a second or third generation of Norwegian colonists, if they were transported into Greenland, would end up by eating like Greenlanders. Even we, ourselves, my friends

if we lived in this happy country, we'd get to live like the Greenlanders, and we'd become regular gluttons."

"Dr. Clawbonny is making me feel quite hungry talking like that," said Bell.

"He isn't me," replied Altamont; "it's quite putting me off seal-meat. But I think we are going to make the experiment. If I'm not mistaken there's something there on the ice that looks as if it's moving."

"It's a walrus," whispered the doctor. "Quietly now—come on!"

A large amphibian was about two hundred yards from the sportsmen, rolling about voluptuously in the faint sunshine. The three hunters separated so as to surround the animal and cut off its retreat; when they were within a few paces of it they crouched down behind the hummocks and opened fire.

The walrus turned round, still full of vigour; it crushed the ice blocks as it strove to escape, but Altamont attacked it with his axe, and hacked off its flippers. It made a desperate resistance, but several more shots finished it and left it stretched lifeless on the ice field, now reddened with its blood. It was a fine animal, and measured fifteen feet from its nose to the tip of its tail; it would certainly have yielded several barrels of oil. The doctor cut off the most savoury parts of the flesh, and left the rest to the ravens, which at that season were already soaring in the air.

Night began to fall and the hunters thought of getting back to Fort Providence; the sky had got quite clear and the stars shone out, apparently waiting for the moon.

"Come, let's go back," said the doctor; "we haven't been too lucky, but as long as the hunter takes home his supper he can't complain. We must go the shortest way, and try not to get lost. The stars will show us the way."

In lands where the Pole Star is above the travellers' heads, it is not so easy to travel by the stars: when the north is exactly overhead other points of the compass are hard to find. Fortunately the moon and the great constellations came to help the doctor find the way. To make it shorter, he decided to cut across country instead of

following the coast. This was more direct but less sure, and after about half an hour's walking the party was completely lost. They wondered whether they had not better build a snow-house and wait for dawn; but the doctor feared that Hatteras and Johnson would be anxious and insisted upon going on.

"Duk's leading us," he said, "and he's sure to know the way; his instinct is surer than a compass or a star. Let's follow him."

Duk went on, and they trusted his skill. Soon a light appeared on the horizon; it penetrated the low mists, therefore it could not be mistaken for a star.

"There's our lighthouse," exclaimed the doctor.

"You think so, Dr. Clawbonny?" said the carpenter.

"I'm quite certain. Come on."

As the travellers went on, the light grew more intense, and they were soon enveloped in a cloud of luminous dust. They walked down the beam and behind them gigantic shadows, clearly outlined, extended over the carpet of snow. They quickened their pace, and half an hour later they were climbing up the slope to Fort Providence.

CHAPTER IX

COLD AND HEAT

HATTERAS and Johnson were anxiously waiting for the sportsmen, who were delighted to get back to their warm, comfortable dwelling. The temperature had fallen during the evening, and the thermometer marked 70° below zero outdoors. The hunters were exhausted and almost frozen, but fortunately the fires were blazing, and the stove needed only the products of the hunt; the doctor transformed himself into a cook and grilled some walrus cutlets. At nine the five men were sitting down to a splendid supper.

"Really," said Bell, "even if I risk being taken for an Esquimau, I must say that meals are the chief things in wintering, and when we've got them we're not going to turn up our noses at them."

The guests had their mouths too full to reply, but the doctor nodded his assent. The walrus cutlets were pronounced excellent, and the proof of this was that they were all eaten. At dessert the doctor prepared his coffee and as usual let no one else have a hand in it; he made it on the table with a spirit-stove, and poured it out boiling. He drank it so hot that Altamont said, "You'll set fire to yourself, doctor."

"There's no danger," the doctor answered.

"Your palate must be copper-plated," said Johnson.

"There are people, and I'm one of them," replied the doctor, "who drink their coffee at a hundred and thirty degrees, and I challenge you to do the same."

"A hundred and thirty degrees!" exclaimed Altamont, "but your hand couldn't bear a heat like that!"

"That's quite true, Altamont, for the hand can only bear water at a hundred and twenty-two degrees; but the palate and the tongue aren't so sensitive, and they can stand a heat that the hand couldn't."

"You surprise me," said Altamont.

"Well, I'll show you." And the doctor, picking up the sitting-room thermometer, plunged it into his boiling coffee; he waited till the instrument had fallen to 131° and then drank his coffee with obvious satisfaction.

Bell tried to copy him, but burnt himself so badly he gave a cry of pain.

"That's because you aren't used to it," the doctor explained.

"Can you tell us the highest temperatures the human body can bear?" Altamont asked the doctor.

"Easily," replied the doctor. "Experiments have revealed some very curious facts. I can remember one or two that will show you we can get used to anything, even to not being roasted in an atmosphere that would cook a beef-steak. Servant-girls in the bakery of La Rochefoucauld, in France, could stay ten minutes in the oven in a temperature of three hundred degrees—that's eighty-nine degrees higher than boiling water—while apples and meat were roasting around them."

"What girls!" exclaimed Altamont

"Another example which can't be doubted is that in 1774 nine of our compatriots endured an atmosphere of two hundred and ninety five degrees, while eggs and roast beef were cooking beside them."

"And they were English!" said Bell, with patriotic pride

"Yes, Bell," replied the doctor.

"Oh, Americans would have done better still," smiled Altamont.

"They'd have let themselves be roasted," laughed the doctor.

"And why not?" asked the American.

"Anyway, they haven't tried it, so I'll keep to my countrymen. I'll add another case which would be incredible if we could doubt the witnesses' veracity. The Duke of Raguse and Dr. Jung, a Frenchman and an Austrian, saw a Turk plunge into a bath at a hundred and seventy degrees."

"But surely," protested Johnson, "that wasn't worth as much as the servants in the town oven of our own countrymen!"

"I beg your pardon," the doctor replied. "There's a great difference between plunging into hot air and hot water; hot air produces a perspiration which protects the body from heat, but in hot water we don't perspire, and it scalds us. The outside limit of heat for a bath is generally fixed at a hundred and seven degrees, so the Turk must have been quite out of the ordinary to bear such a heat."

"Dr. Clawbonny," asked Johnson, "what's the usual temperature of the animals?"

"It varies according to their nature; the birds have the highest temperature—the duck and the hen are the most remarkable, with a bodily heat of over a hundred and ten degrees—but the screech owl is less than a hundred and four degrees. Then come the mammals and men, the average Englishman's temperature is a hundred and one degrees.

"I'm sure Captain Altamont will say an American's is higher," laughed Johnson

"Yes," agreed Altamont, "we have got some hot heads among us, but as I haven't stuck a thermometer into their gullets I can't be sure!"

"There isn't much difference between men of different races when they're in the same circumstances whatever their food is," said the doctor; "and what's more, the temperature of the human body is about the same at the Equator as at the Pole."

"Do you mean to say," protested Altamont, "that our natural heat is the same here as in England?"

"Practically," replied the doctor; "as to the other mammals, their temperature is generally a little higher than that of man. The horse's natural heat is about the same and so is that of the hare, elephant, porpoise, and tiger; but cats, squirrels, rats, panthers, sheep, oxen, dogs, monkeys, bucks and goats attain a hundred and three degrees; and, lastly, the luckiest of all, the pigs, exceed a hundred and four degrees."

"That's humiliating for us," said Altamont.

"The amphibians come next, and the fish; their tempera-

ture varies greatly according to the water. A snake's is hardly eighty-six degrees, a frog's seventy degrees, and a shark's a degree and a half lower; insects appear to have the same temperature as the water and air around them."

"That's all very well," put in Hatteras, who had not spoken so far, "and we're grateful to the doctor for putting his knowledge at our service, but we're talking as though we had tropical heat to face. Wouldn't it be better to talk about the cold, to know what we're likely to be exposed to, and what have been the lowest temperatures known up to now?"

"The captain's right," agreed Johnson.

"Nothing easier," said the doctor.

"I thought as much," replied Johnson. "You know everything."

"My friends, I only know what others have told me and you'll soon be as wise as I am. There have been many memorable winters in Europe, and the more rigorous seem to have returned periodically about every forty years, a period which coincides with that when the sunspots are most numerous. In the winter of 1364 the Rhine was frozen up to Arles; in 1408 the Danube was frozen throughout its course, and the wolves crossed the Cattagat dry-shod; part of the Adriatic and the Mediterranean was frozen in 1509, and the Baltic stayed frozen on 10th April; in 1608 all the cattle perished in England and in 1789 the Thames was frozen to Gravesend; the French have a terrible memory of the winter of 1813; lastly, 1829 was the earliest and longest winter of the nineteenth century. So much for Europe."

"But here, in the Polar Circle, what degree of temperature can be reached?" asked Aliamont.

"Really, I think we've ourselves experienced the greatest cold that's ever been observed," replied the doctor; "one day the alcohol thermometer registered seventy-two degrees below zero, and, if I remember rightly, the lowest temperatures met with by Arctic travellers have been sixty-one degrees at Melville Island, sixty-five degrees at Port Felix, and seventy degrees at Fort Reliance."

"Yes," said Hatteras, "this terrible winter held us up, and very badly too!"

"You were held up?" asked Altamont, looking fixedly at him.

"Yes, in our voyage westwards," the doctor made haste to answer.

"Then," Altamont returned to the conversation, "the highest maximum and lowest bearable temperatures are only about two hundred degrees apart?"

"Yes," replied the doctor; "a thermometer exposed to the open air and sheltered from reflection, never registers more than a hundred and thirty-five degrees above zero, and in the greatest cold it never descends below seventy two degrees. So, you see, we can set our minds at rest."

"But," said Johnson, "suppose the sun was to go out suddenly, wouldn't the earth get much colder?"

"The sun won't go out," the doctor answered; "but if it did the temperature wouldn't go any lower than the point I mentioned."

"Tell me, Doctor," asked Altamont, "isn't the temperature of America lower than that of any other country in the world?"

"Yes, but it's hardly a thing to boast about!" laughed the doctor.

"How is that explained?"

"Explanations have been put forward, but they aren't satisfactory. Halley thought that a comet had grazed the earth obliquely, and changed the position of her axis of rotation—that is, of her Poles. He thought the North Pole was formerly in Hudson Bay, and that the shock carried it farther to the east. Then the countries around the former Pole, after being frozen for so long, stayed cold that long centuries of sunshine haven't yet warmed them."

"Do you accept that theory?"

"Not for an instant, for what applies to the east coast of America, doesn't apply to the west, which has a much higher temperature. The only explanation is that the isothermal lines differ from the earth's parallels."

"You know, Dr. Clawbonny," said Johnson, "it's nice to talk about the cold where we are at present."

"Yes, friend Johnson, we can bring practice to the help of theory. These countries are a vast laboratory where experiments may be made on low temperatures; only always keep on your guard and be careful. If any part of your body freezes, rub it at once with snow to restore the circulation; if you come near the fire take care, for you might burn your hands or feet without noticing it; that would mean an amputation, and we must try not to leave any bits of ourselves in these boreal countries. And now, my friends, we'd do well to try to get some rest. Who's looking after the stove?"

"I am," answered Bell.

"Well, take care not to let the fire get lower, for it is devilish cold tonight."

"Never fear, Dr. Clawbonny; it's too cold to forget the stove, but see, the sky's all on fire!"

"Yes," replied the doctor, going over to the window. "A splendid aurora borealis! What a sight! I never get tired of looking at it."

He always admired these cosmic phenomena, to which his companions paid little attention; he had noticed that their appearance had always preceded perturbations of the magnetic needle, and he made some notes on this subject for his "Weather book".¹

Soon, while Bell watched near the stove, the others were stretched out asleep on their beds.

¹ Devised by Admiral Fitzroy for recording meteorological observations—J.V.

CHAPTER X

THE DELIGHTS OF WINTERING

LIFE at the Pole is sadly monotonous. Here man is entirely at the mercy of the caprices of the air, in which tempests and extreme cold are depressingly combined. For most of the time it is impossible to go outdoors, and the explorers have to stay sheltering in the ice. So long months pass while the winterers lead a mole's life.

On the following day the thermometer sank a few degrees, and the air was filled with eddies of snow which shut out all the light. The doctor saw that he was nailed indoors with his arms folded and nothing to do except to clear the entrance lobby every hour to stop it from getting blocked and to repolish the ice walls, which the heat of the interior made damp; but the snow-house was built very solidly and the snow made it still more weatherproof by adding to the thickness of the walls.

The stores were in equally good condition. Everything taken from the ship had been placed in careful order in these "commercial docks", as the doctor called them. Although these store-houses were only sixty feet from the house, when there was a drift it was impossible to reach them, so that a supply of food had to be kept in the kitchen every day.

The precaution taken in unloading the *Porpoise* had been opportune. The ship was subjected to a slow but irresistible pressure, which crushed her little by little; clearly nothing could be done with her fragments. The doctor hoped to be able to make a long-boat out of her to get back to England; but the moment had not yet come for beginning to build her.

For most of the time the five winterers were completely idle. Hatteras was always stretched out on his bed thinking; meanwhile Altamont drank or slept, and the doctor

took care not to disturb them, for he was in continual dread of a quarrel, and the two spoke to one another but rarely.

During the meals the prudent doctor always took care to lead the conversation to subjects that did not arouse their self-love, but he had much to do to avert their susceptibilities. He did all he could to instruct and interest and amuse his companions; when he put his notes in order he told his companions about any subject of history, geography, or meteorology which they suggested. He was both philosophic and amusing, taking care to let each incident teach a salutary lesson. His inexhaustible memory never failed him, and he gave the incidents he described a practical application and clinched his theories by personal arguments.

This worthy man might be called the soul of the little community, a soul which radiated candour and justice. His companions had complete confidence in him, and even Hatteras was fond of him. He made the existence of these five men, abandoned at six degrees from the Pole, seem quite natural; when the doctor spoke they might well have been listening to him in his study at Liverpool.

Their situation was, however, very different from that of shipwrecked mariners cast on to the Pacific islands, those "Robinsons" whose fascinating history almost always arouses the reader's envy. Here a prodigal soil, an opulent Nature, offers a thousand varied resources; in those lovely countries a little intelligence and work procure everything needed for material happiness. There Nature anticipates the wants of man: fishing and hunting provide him with food; trees grow for him, caverns open to shelter him, brooks flow to quench his thirst; magnificent foliage protects him from the heat of the sun, and the terrible cold never threatens him in the mild winters. One grain thrown carelessly on the ground produces a harvest a month later. Every pleasure that can be tasted apart from society is to be found there. Moreover, these enchanted islands lie on the ocean highways, and the castaway can always hope for rescue, and wait patiently for it.

But here on the coast of New America, what a difference!

This comparison often occurred to the doctor, but he kept it to himself and inwardly he cursed this idleness. He longed for the thaw to return so that he could begin his journeys again; yet he could not think of it without uneasiness, as he foresaw violent scenes between Hatteras and Altamont. If ever they got to the Pole, what would be the result of their rivalry?

He wanted to bring them to a complete understanding, but to reconcile an Englishman and an American, two men made even more hostile by their common ancestry, the one dominated by insular arrogance, and the other by his national audacity and pride, such a task was beset by difficulties. When the doctor thought of the merciless competitiveness of men, of their patriotic rivalries, he did not shrug his shoulders, but he grew sad over human weakness. He often discussed it with Johnson; the old sailor and he were of the same opinion; they pondered over the best thing to do, and foresaw many future complications.

Meanwhile, the bad weather continued; to leave Fort Providence, even for an hour, was not to be dreamed of. They had to stay in the snow house night and day. They were all bored except the doctor, who always found a way to be busy about something.

"Isn't there any way to pass the time?" Altamont asked one evening. "It's not living to be hibernating all the winter like reptiles."

"That's true," answered the doctor; "but unfortunately there aren't enough of us to organize any recreations."

"Then you think that if there were more of us we'd find it easier to fight against idleness?"

"Certainly, for when whole crews have passed the winter in these regions they've found ways of avoiding boredom."

"Well," said Altamont, "I'd like to know how they managed it; they didn't act charades, I imagine!"

"No, but they brought into the far north two sources of amusement, the press and the theatre."

"What! They had a newspaper!" replied the American.

"They acted plays!" exclaimed Bell.

"Yes; and they found it great fun. When they were win-

tering at Melville Island, Captain Parry suggested these two ways of amusement to his crew, and they were a wonderful success."

"Well," said Johnson, "I wish I'd been there; it must have been queer."

"It was queer and amusing, Johnson. Lieutenant Beechey became theatrical manager, and Captain Sabine was chief editor of the *North Georgian Gazette and Winter Chronicle*."

"Good titles," commented Altamont.

"The newspaper appeared every Monday, from 1st November, 1819, to 20th March, 1820. It reported all the incidents of wintering, the hunts, general news, accidents, meteorology, and temperature. It included episodes, more or less amusing, and if it was no good looking for the wit of Sterne or the leading articles of the *Daily Telegraph*, it amused the crew; its readers were not hard to please; never, surely, could the profession of journalism have been more attractive."

"I'd like to see some extracts from that newspaper, Doctor," said Altamont; "its articles must have been frigid from the first word to the last."

"Not at all, not at all," replied the doctor; "what would have seemed a little naive to the Liverpool Philosophical Society or the London Literary Institute, were good enough for crews buried beneath the snow. Would you like to judge for yourselves?"

"You don't mean to say you can remember——?"

"No, but you had Parry's *Voyages* on the *Porpoise*, and if you like I can read his own record."

"Yes, do!" cried the doctor's companions.

"Nothing could be easier."

The doctor got the book and found the passages he wanted. "Here are some extracts from the *North Georgian Gazette*—here's a letter to the editor:

"Mr. Editor—It was with real pleasure I saw in circulation among us, your proposals for a Weekly Newspaper . . . I am confident that such a paper will, under

your censorship, be productive of much amusement and serve to relieve the *taedium* of our hundred days of darkness . . .

The interest which I take in your present plans enabled me to find out . . . the effect it would have upon our community; I have now much pleasure in assuring you, in the language of our London journals, that they have produced a great sensation on the public mind.

The very day after your prospectus appeared . . . there was a greater demand for ink than has been known during the whole voyage; the green baize of our mess tables has been ever since covered with innumerable penparings, to the great detriment, by the by, of one of our servants, whose finger has been terribly festered by a prick he received in sweeping them off, and I have it on authority, on which you may rely, that Serjeant Martin has, within the last week, sharpened no less than nine pen-knives.

It has been remarked that our tables absolutely groan under the weight of writing desks, which for months past have not seen 'the blessed light', and it is well known that the holds have been more than once opened for the express, though not professed, purpose of getting up fresh packages of paper originally intended for next year's summer but which is now destined to grace your file . . .

PS.—I forgot to mention to you, that I have some reason to suspect that an attempt will occasionally be made to slide into your box communications which are not *quite* original . . . for a gentleman was seen at his desk late the other night with a volume of the *Spectator* before him, while he was thawing his ink over a lamp. With all deference to your extensive reading, I think it right to put you on guard against such attempts, for I have no idea, Mr. Editor, of being obliged to read in the *Winter Chronicle* what our great grandfathers conned over at their breakfast tables more than a century ago."

"Good," commented Altamont, "whoever wrote that was a sharp lad."

"Sharp's the word," agreed the doctor, "but listen; here's something else."

"WANTED. A middle-aged Woman, not above thirty, of good character, to assist in DRESSING the LADIES at the THEATRE. Her salary will be handsome, and she will be allowed tea and small beer into the bargain. None need apply but such as are perfectly acquainted with the business and can produce undeniable references. —A line addressed to the Committee will be duly attended to.—N.B. A widow will be preferred."

"Those fellows had good taste," remarked Johnson.

"Did they get that widow?" asked Bell.

"I should think so, for here's an answer addressed to the Theatre Committee.

"Gentlemen, — I am a widow, twenty-six years of age, and can produce undeniable testimonials of my character and qualifications; but before I undertake the business of dressing the ladies at the theatre, I wish to be informed whether it is customary for them to keep on their breeches; also, if I can be allowed two or three of the stoutest able-seame' or maines to lace their stays. So no more at present from

Gentlemen, yours as may be,
Abigail Handicraft.

PS. — Could you not allow hollands instead of small beer? As for tea, that is no object."

"Splendid!" exclaimed Altamont "I can see those ladies' maids lacing you up with a windlass. Captain Parry's crew must have been a cheerful lot."

"Like everybody who gets what he aims at," replied Hatteras.

Having thrown this comment into the discussion, he relapsed into his usual silence. Not wishing to discuss the subject further, the doctor went on reading.

"Here\ a list of Arctic Miseries; there are plenty more of them, but you'll see that some of them are true enough:

"Going out on a winter morning for the purpose of taking a walk, and before you have proceeded ten yards' from the ship, getting a cold bath in the cook's steep hole. (A hole in the ice for steeping salt meat, etc.)

When on a hunting excursion, and being close to a fine deer, after several attempts to fire, discovering that your piece is neither primed nor loaded, while the animal's four legs are employed in carrying away the body.

Setting out with a piece of new bread in your pocket on a shooting party, and when you feel inclined to eat it, having occasion to observe that it is so frozen that your teeth will not penetrate it.

Being called from your table by intelligence that a wolf is approaching the vessel, which, on closer inspection, proves to be a dog; on going again below, detecting the cat in running off with your dinner.

Returning on board your ship after an evening's visit in a contemplative humour, and being aroused from a pleasing reverie in the close embrace of a bear.

Sitting down in anticipation of a comfortable break' fast, and finding that the tea by mistake is made of salt water."

"So you see, my friends," the doctor commented, "we wouldn't find it hard to add to this list of Arctic Miseries, but when we have to endure them it's a relief to put them on record."

"Well," replied Altamont, "that Winter Chronicle was certainly an amusing paper, and it's a pity we can't take out a subscription for it."

"What about trying to publish one?" Johnson suggested.

"We five?" protested Clawbonny. "We'd all be editors and we shouldn't have enough readers."

"And no spectators if we thought of producing a play," agreed Altamont.

"Tell us about Captain Parry's theatre, Dr. Clawbonny," said Johnson. "Did they produce any new plays?"

"Yes; at first two volumes of plays taken on board the *Hecla* were acted till the repertory was exhausted, as performances were given every fortnight; then improvised authors set to work and Parry himself composed a comedy for Christmas that had an immense success; it was called *The North-West Passage; or, The End of the Voyage.*"

"A splendid title," replied Altamont; "but I must admit that if I had to write that play I should be perplexed about its climax."

"You're quite right," agreed Bell; "who knows how this will all end?"

"Well," said the doctor, "what's the good of wondering about the last act while the first is going so well? Let's leave it to Providence, my friends. The end is in the hands of the Author of all things; so let's have faith in His talent; He will know how to get us out of it."

"We'd better go and dream about it!" replied Johnson. "It's late, and as it's bedtime let's go to bed."

"You're in a hurry, old friend," said the doctor.

"I like my bed, Dr. Clawbonny. My dreams are good—I dream about warm countries, so that I really spend half my life under the Equator and the other half at the Pole."

"You're lucky to be built that way," said Altamont.

"I am," smiled the quartermaster.

"Well," answered the doctor, "it would be cruel to keep poor Johnson out of bed. His tropical sun is waiting for him. Let's turn in."

CHAPTER XI

DISQUIETING TRACKS

DURING the night from 26th to 27th April the weather changed; the thermometer fell considerably, and the inhabitants of Doctor's House perceived this by the cold that penetrated under their blankets. Altamont, guarding the fire, took care not to let it out, and had to stock it with fuel to keep the interior temperature up to 50°.

This chill announced the end of the tempest, and the doctor rejoiced at it, for they could resume their usual occupations, hunting and surveying the land; it would put an end to the lonely idleness which embittered even the pleasantest characters.

Next morning he got up early and cut a path through the ice heaped up right to the cone of the lighthouse. The wind had veered north; the air was clear; long white sheets of snow provided a firm carpet for the foot.

Soon the five winterers had left Doctor's House, and their first work was to clear it of the frozen masses which encumbered it. The tableland could no longer be recognized; not the slightest sign of a habitation was visible: the tempest had filled in all the inequalities, and had levelled everything; the ground had risen at least fifteen feet.

They had to sweep away the snow, and make the building look rather more architectural, to straighten the outlines and re-face its wall. The work was not difficult, and when the ice had been removed the walls were soon reduced to their ordinary thickness with the snow-knife. After two hours of constant work the granite foundation reappeared, and access to the food stores and the magazine was practicable. But as in so uncertain a climate the conditions might return, a further supply of food was transferred to the kitchen. The need of fresh meat was being felt by

over-salted stomachs; this meant work for the hunters and they got ready to set out.

But the end of April does not bring the Polar spring, which still lay six weeks ahead; the sunshine was too feeble to pierce the snow and revive the rare flora of the region. Although it was feared that both birds and quadrupeds must still be scarce, a hare, a few brace of ptarmigans, or even a young fox, would be acceptable on the table of Doctor's House, so the hunters set out with zeal

The doctor, Altamont, and Bell accepted the task of exploring the country. Altamont, it seemed, was a skilled hunter and a good shot, though somewhat boastful; Duk was his equal, and less self satisfied

The three adventurers went up past the east side of the cone, and made their way across the immense white plains. They had not gone more than a couple of miles from the fort when they met with plentiful animal tracks, which continued down to the shore of Victoria Bay, and seemed to encircle Fort Providence

After anxiously studying these tracks, the hunters looked at one another.

"Well," said the doctor, "that's plain enough."

"Too plain," repeated Bell; "they're bear tracks."

"Splendid game," said Altamont, "but today it's got one fault"

"What's that?" asked the doctor

"Too much of it," replied the American.

"What do you mean?" asked Bell.

"I meant that there are five distinct bear trails, and five bears—that's plenty for five men"

"Are you sure of that?" asked the doctor

"Look and judge for yourself; this footprint isn't like this one; the claws are wider apart. Here's the track of a smaller bear; compare them all, and you'll see there are five of them."

"That's clear enough," said Bell, after studying them carefully.

"Then," decided the doctor, "we mustn't be reckless,

but keep on the look-out; these animals must be famishing after their hard winter. They might be extremely dangerous; and as there's no doubt about their numbers——"

"Nor about their intentions," added the American.

"Do you think they have found out we're here?"

"Certainly, unless we've fallen into a den of them; but even that wouldn't explain why their footprints form a circle. Look, they came from the south-east, they stopped just there, and began to investigate the ground."

"You're right," agreed the doctor; "and they've certainly been here during the night."

"And during other nights too," replied Altamont, "only the snow has covered their tracks."

"No," the doctor answered; "it's more likely they waited for the tempest to end; then, driven by necessity, they went down to the shore in the hopes of surprising the seals, and on their way they smelt our scent."

"That must be it," agreed Altamont; "anyhow, it'll be easy to see if they come back tonight."

"How?" asked Bell.

"By rubbing out some of their footprints, and if to-morrow we find fresh ones it'll be quite clear that Fort Providence is what they're really after."

"Well," replied the doctor, "at any rate we'll know what to expect."

The three hunters set to work, and by scratching up the snow they soon obliterated the footprints for about a hundred yards.

"It's queer those beasts could smell us so far away," said Bell; "we haven't burnt anything greasy that might attract them."

"Bears have a very keen sight and a very keen smell," said the doctor; "besides, they're very intelligent, almost the most intelligent animals there are, and they've scented something unusual here."

"They may have come as far as the plateau during the storm," suggested Bell.

"Then why should they have stopped just here?" wondered the American.

"We can't answer that," replied the doctor, "but we can expect them to make their circle smaller and smaller as they sniff around Fort Providence."

"We shall soon see," answered Altamont.

"Now let's get on," said the doctor, "but keep your eyes open."

The hunters kept a sharp look-out. They were apprehensive that some bear might be ambushed behind an ice-hill, and they even took some of the large ice-blocks for bears, which are just as white; but to their great satisfaction they met with nothing.

They at last came back half way up the cone, and looked all round from Cape Washington to Johnson Island. They could see nothing; all was motionless and white; not the slightest sound could be heard, so they re-entered the house.

When Hatteras and Johnson learned the position, it was decided to keep the most scrupulous watch. Night came; nothing troubled its peace; nothing could be heard which might give warning of danger.

Next day, at dawn, the explorers went, fully armed, to examine the snow; they found the same traces as before, but nearer; clearly the enemy was preparing to besiege Fort Providence.

"They've opened a second parallel," said the doctor.

"And come farther forward," added Altamont. "Look at these tracks coming towards the plateau; they belong to a sizeable beast."

"Yes, they're creeping up on us little by little," said Johnson; "it's plain they're going to attack us."

"There's no doubt about it," replied the doctor; "we must take care not to show ourselves. there aren't enough of us to fight them."

"But where can those cursed bears be?" exclaimed Bell.

"Behind some of the icebergs off to the east, where they're watching us; don't let's be rash."

"But what about the hunting?" asked Altamont.

"We must put it off for some days," answered the doctor.

"Let's rub out the nearest footprints again and tomorrow

we'll see if there's more of them. So we'll find out what their manoeuvres are."

Having followed his advice, they went back to seek refuge in the fort; the presence of these terrible animals forbade any travel. They kept a sharp look out on Victoria Bay. The lighthouse was taken down, it was of no use for the moment, and it might attract the animals' attention, the lantern and electric wires were put away in the house, then the explorers began, in turn, to keep watch on the upper tableland. These new enemies could not be attacked by so small a number of men.

Here were new troubles to endure, but what else could they do? They could not risk so unequal a combat, their lives were too precious. Perhaps, not seeing anything, the bears would be thrown off the track, and if they scattered there would be some chance of attacking them successfully. However, this was a new interest to vary the idleness, and nobody was sorry to have something to do, if only to act as sentry.

The 28th April passed without any signs of the new enemy. Next day, when they went to look for the tracks, exclamations of astonishment broke from them. There weren't any footprints and the surface of the snow was unbroken.

"Good!" exclaimed Altamont. "The bears are off the trail! They hadn't enough perseverance, and they got tired of waiting! They've gone! A pleasant journey to them! And now for a hunt!"

"Who knows?" replied the doctor. "I think we'd better wait another day. Certainly they didn't come back last night, at least on this side——"

"Let's go all round the plateau," Altamont suggested, "and then we'll know what to think."

Very well, the doctor agreed.

But however carefully they searched within a radius of two miles they could not find any trace of them.

"Now can't we go hunting?" asked the impatient American.

"Let's wait till tomorrow," suggested the doctor.

"Very well," replied Altamont, though scarcely able to contain his impatience.

They went back to the fort; but, as on the day before, they had to man their look-out posts.

When Altamont's turn came he went to relieve Bell on the summit of the cone. Hatteras then called his companions around him; the doctor left his note-book, Johnson his stove, and soon Bell joined them.

Anyone would have thought that the captain was going to discuss the dangers of the situation; he was not even thinking of them.

"I want to take advantage of the American's absence to talk business," he said: "there are some things he's got nothing to do with, and I don't want him to meddle with them."

Johnson and the doctor looked at one another, not knowing what he was driving at.

"I want," Hatteras continued, "to come to an understanding with you about our future plans."

"Yes," agreed the doctor; "now we're alone, let's talk."

"In a month's time," continued Hatteras, "or six weeks' at the latest, the weather will be fit for long journeys. Have you thought of what would be best to do during the summer?"

"What do you think Captain?" asked Johnson.

"You know that not an hour of my life passes without my thinking of my aim. I suppose neither of you means to go back——"

This hint was followed by a silence.

"If I have to go on alone," said Hatteras, "I'm going to the North Pole; we're only three hundred and sixty miles from it at most. Never has man ever been so near it, and I shall not lose such an opportunity without trying everything, even the impossible. What are your ideas about it?"

"The same as yours," the doctor answered at once.

"And yours, Johnson?"

"The same as the doctor's."

"It's your turn to speak, Bell?"

"Captain," answered the carpenter, "it's true we have

no family expecting us back in England, but after all it's our country. Aren't you thinking of going back?"

"It will be all very well to go back when we've found the Pole. Indeed, it'll be better. The difficulties will get less instead of greater, for by going farther north we'll get away from the coldest part of the earth. We've got enough fuel and food for a long time. There's nothing to stop us, and we should be wrong not to go on now."

"Very well, we're all with you, Captain," Bell decided.

"I never had any doubts of you. We shall succeed, my friends, and England will have all the glory of our success."

"But we have an American with us," Johnson pointed out.

"I know that," Hatteras said in a serious tone, after making an angry gesture.

"We can't leave him here," said the doctor.

"No, we can't," answered Hatteras mechanically.

"And he'll be sure to come with us."

"Yes, he'll come, but who will be in command?"

"Why, you, Captain, of course."

"But suppose that Yankee refuses to obey me!"

"I don't think he will," said Johnson; "but if he won't obey your orders——?"

"Then he and I will have to settle it."

"How are we to travel?" asked the doctor.

"Along the coast as far as possible," Hatteras answered.

"But if we find the open sea, as very likely we shall?"

Hatteras did not reply plainly he was embarrassed.

"Perhaps we could build a long-boat with the remains of the *Porpoise*," Bell suggested.

"Never!" exclaimed Hatteras violently.

"Never?" repeated Johnson.

The doctor shook his head; he understood the captain's repugnance to the idea.

"Never," repeated the latter. "A long-boat made from the wood of an American ship would be American——!"

"But, Captain——" Johnson began.

The doctor signed to him not to insist just then. The question must be kept for a more opportune moment; the

doctor did not share Hatteras's repugnance, though he understood it, and he hoped to make the captain change his mind. He discussed other matters, discussed the possibility of going northwards along the coast to the Pole, and thus kept the conversation away from dangerous topics until it was abruptly ended by Altamont's return. The American had seen nothing.

Thus the day ended and the night passed quietly. Evidently the bears had disappeared.

CHAPTER XII

IMPRISONED IN THE ICE

NEXT day a hunting party was organized, consisting of Hatteras, Altamont, and the carpenter. The disquieting tracks had vanished and the bears must certainly have renounced their plan of attack, either from fear of their unknown enemies, or because nothing had shown them the presence of living creatures in the snow.

While the three hunters were away, the doctor was to go to Johnson Island to examine the condition of the ice, and to make some hydrographical observations. Johnson was to remain at Doctor's House. The cold was intense, but the winterers bore it well: their skin had got used to the temperature.

The three hunters got ready to start; each was armed with a double-barrelled gun, rifled to fire conical bullets; a supply of pemmican in case night should surprise them before the end of their journey; they also took their snow-knives—a tool indispensable in these regions—and they each stuck an axe in the belt of their buckskin jackets.

Thus equipped and armed, they could go far, and as they were skilful and daring they could count upon good hunting. They were ready at eight in the morning, and set off while Duk gambolled before them. Climbing the hill on the easy side, they skirted the lighthouse cone and started across the southern plain bounded by Bell Mount.

The doctor, after having agreed with Johnson upon an alarm signal in case of danger, went down to the coast so as to reach the complicated ice-formation of Victoria Bay.

The boatswain stayed alone, but not idle, at Fort Providence. He began by setting free the Greenland dogs; they delightedly rolled about in the snow. He then did the housework, replenished the fuel and food supply, put the

store-houses in order, mended the broken utensils, darned the blankets, and got the snow-shoes ready for the long summer journeys. There was plenty to do, and he worked with the skill of a sailor, who has to be a Jack-of-all-trades. As he worked, he pondered over the previous night's conversation; he thought of the captain, and of his obstinacy, heroic and honourable though it was, in refusing to let an American, or even an American boat, precede or accompany him to the Pole.

"It looks like being difficult," he said to himself, "to cross the ocean without a boat, and if the open sea is before us we'll have to sail. Nobody could swim three hundred miles, even if he were the finest Englishman. Patriotism has its limits. Well, we'll see. There's plenty of time yet, and Dr. Clawbonny hasn't said his last word; he's clever enough to make the captain change his mind. I'll wager that as he goes to the island he'll give a glance at the *Porpoise*, and he'll know just what she can do."

Suddenly, about an hour after the hunters had gone, his thoughts were interrupted by an explosion about three miles away.

"Good, they've found something," thought the old sailor, "and without going too far, as I can hear them so plainly. It's true the atmosphere is very clear."

A second explosion, then a third, followed one after the other.

"They've got to a good place," thought Johnson.

Three other explosions were heard farther off.

"Six shots," thought Johnson; "their guns have all gone off now: it must have been a hot business. Have they——" The idea that had come to him made him turn pale; in a few minutes he had left the snow-house and climbed the hill to the top of the cone. What he saw made him shudder.

"The bears!" he exclaimed.

The three hunters, followed by Duk, were running back as far as they could, pursued by five gigantic animals. The six bullets could not have injured them. Hatteras, who was bringing up the rear, could succeed in keeping his distance between the animals and himself only by throw-

ing his cap, his axe, and even his gun, at them. The bears stopped, as they usually did, to smell these objects and so lost a little ground.

It was thus that Hatteras, Altamont, and Bell, completely out of breath with running, reached Johnson, and they all let themselves slide down the slope to the snow-house. The five bears were almost touching them, and the captain had to ward off a paw with his snow-knife.

In the twinkling of an eye he and his companions had shut themselves in the house, while the animals waited on the upper plateau.

"At last!" exclaimed Hatteras. "We can protect ourselves better five against five"

"Four against five!" cried Johnson in a terrified voice.

"What do you mean?"

"The doctor!" replied Johnson, pointing to the empty living-room; "he's gone down to the island."

"Poor fellow!" exclaimed Bell.

"We can't leave him there," Altamont protested.

"Hurry!" shouted Hatteras. He pulled open the door, but he had scarcely time to shut it again; his head had nearly been broken by a blow from a gigantic paw

"They're outside!" he cried.

"All of them?" asked Bell.

"Yes, all!" answered Hatteras.

Altamont rushed to the windows and filled up their frames with blocks of ice cut from the walls of the house. His companions imitated him without a word; the silence was only broken by Duk's howlings.

Needless to say, the men had only the one thought; they forgot their own danger, and thought solely of the doctor. Poor Clawbonny, so good, so unselfish! The soul of the little colony: for the first time he was not there. The direst peril, maybe a frightful death awaited him, for when he had finished his investigations he would come back unsuspectingly and find himself in the presence of these ferocious animals.

And there was no means of warning him.

"But unless I'm wrong he'll be on the look-out," said

Johnson. "Your shots must have warned him; he'll think something must have happened."

"But if he was too far off," replied Altamont, "or if he didn't realize it? There's nine chances out of ten that he'll come back without dreaming of danger. The bears are hidden by the slope of the fort, and he won't be able to see them"

"Then we must get rid of these dangerous beasts before he does come back," replied Hatteras

"But how?" said Bell.

The answer to this question was difficult. To attempt a sortie was impracticable. They had barricaded the entrance, but they knew that the bears were strong enough to tear down all the obstacles and reach them if they tried.

The prisoners took up their posts in each of the rooms in the Doctor's House to watch for any attempt at an invasion; they could hear the bears going and coming, growling heavily and scratching at the snow-walls with their enormous paws

But something had to be done, for time was getting precious. Altamont decided to make a loophole so as to fire at his assailants, in a few minutes he had made a sort of hole in the ice wall, but his rifle was hardly outside when it was snatched from his hand with irresistible force without his having time to fire

"The devil!" cried he. "We're not the strongest here," and he hurriedly stuffed up the loophole.

The situation lasted an hour, and no one could foresee how it would end. The chances of a sortie were again discussed; they were slight because the bears could not be fought separately. Nevertheless, anxious to get things finished, and to tell the truth bewildered at being held captive by these animals, they were going to attempt a direct attack when the captain thought of a new means of defence.

He took the poker which Johnson used for his stoves and plunged it into the furnace, then he made an opening in the snow-wall without cutting it completely through, but leaving a thin coating of ice on the outside. His companions

watched what he was doing. When the poker was white-hot, Hatteras explained:

"This red-hot poker will help me to drive them off, for they won't be able to take hold of it, and then it will be easy to fire at them through the loophole without their being able to snatch our rifles out of our hands."

"A good idea," exclaimed Bell, going over to Altamont.

Taking the poker out of the fire, Hatteras thrust it through the wall. The snow, melted at its contact, steamed with a deafening hiss. Two bears ran up, gripped the poker, and gave terrible howls, while four shots sounded at once.

"Got them!" the American and Bell exclaimed at once.

"We'll try again," said Hatteras, closing up the opening. A few minutes later the poker was again red hot; Altamont and Bell took their places after reloading their guns. Hatteras again thrust in the glowing poker, but this time he was stopped by an impenetrable surface.

"Curse it!" cried the American.

"What's the matter?" asked Johnson.

"What's the matter! These cursed animals are blocking us up in our house and burying us alive!"

"They can't be."

"Look, the poker won't go through! This is getting ridiculous."

It was getting more than ridiculous—it was alarming. Things were growing worse. The intelligent animals were using the best means of stifling their prey. They were piling up blocks of ice to keep them from escaping.

"Well, this is hard lines," protested old Johnson, with a mortified air. "For men to treat us like this would be quite bad enough, but bears!"

Two hours went by without bringing any changes in the situation: the sortie had become impossible; the thickness of the walls kept the prisoners from hearing any noise outside. Altamont walked about with the agitation of a brave man, exasperated at finding a danger beyond his courage. Hatteras thought with alarm of the doctor, and of the serious peril that threatened his return.

"Oh," exclaimed Johnson, if only Dr. Clawbonny were here!"

"Well, what would he do?" answered Altamont.

"He'd know how to get us out of it."

"I'd like to know how," Altamont said sarcastically.

"If I knew I shouldn't need him," Johnson answered.

"But I know what advice he'd give us just now."

"What?"

"To have a meal! That can't do us any harm. What do you think, Mr. Altamont?"

"We'll eat if you like; but this is more than ridiculous, it's humiliating."

"I'll bet that after dinner we'll find some way of getting out of it," said Johnson.

No one answered, but they went to the table. Johnson, taught by the doctor, tried to be philosophical in the face of danger, but he did not succeed. They were beginning to feel uncomfortable; the air was thickening in the hermetically sealed dwelling; it could not be renewed through the flue pipe of the stove, which was drawing badly, and it was easy to foresee that before long the fire would go out; the oxygen, absorbed both by their lungs and by the fire, would soon change into carbonic-acid gas, the noxious effect of which is well known. Hatteras was the first to perceive this new danger, and he could not conceal it from his companions.

"Then we've got to get out of here at any price," replied Altamont.

"Yes," answered Hatteras, "but we'd better wait till night; we'll make a hole in the roof; that will renew our supply of air. Then one of us will stand in the opening and open fire on the bears."

"That's the only thing to do," the American agreed.

This agreed upon, they waited for the moment to attempt it, and during the next few hours Altamont broke out in imprecations against a state of things in which bears did better than men.

CHAPTER XIII

THE MINE

NIGHT came, and the lamp was already beginning to turn pale in an atmosphere lacking in oxygen. By eight the last preparations were made: the guns were carefully loaded, and an opening made in the roof of the snow-house.

The work had been going on for several minutes, and Bell was doing it very skilfully, when Johnson left the bedroom, where he had been on watch, and hurried over towards his companions. He seemed uneasy.

"What's the matter?" asked the captain.

"Nothing," Johnson answered hesitatingly, "and yet——"

"Yet what?" said Altamont.

"Hush! Can't you hear a queer noise?"

"Where from?"

"Over there! Something's happening in the bedroom wall."

Bell stopped working to listen. A distant noise could be heard in the wall, as though a hole was being made in the ice.

"Something's scraping at it!" exclaimed Johnson.

"No doubt about that," replied Altamont.

"The bears?" asked Bell.

"Yes, the bears!"

"They've changed their tactics," said Johnson; "they've given up their plan of trying to stifle us."

"Or else they think we're stifling already," Altamont replied angrily.

"We're going to be attacked," said Bell.

"All right, we'll fight it out," Hatteras replied.

"Devil take it, I'm glad," exclaimed Altamont; "I've had enough of these invisible enemies. When we can see them, we'll fight!"

"Yes," replied Johnson. "But not with our guns. They won't be any use in this narrow space."

"Then we'll use our knives and axes."

The noise grew louder; the scratching could be heard quite plainly. The bears were attacking the wall at the corner where it met the snow at the foot of the rock-face.

"The animal that's digging isn't six feet away from us," said Johnson.

"You're right, Johnson," replied the American; "but we've got time to get ready for him"

He gripped his axe in one hand and his knife in the other; his right leg thrust forward, his body drawn back, he took up an aggressive attitude. Hatteras and Bell copied him. Johnson got his rifle ready in case firearms were needed.

The noise grew louder; the ice was cracking under the violent action of the steel claws.

At last only a thin layer separated the assailant from his enemies; suddenly it was broken through like a paper hoop at a circus, and an enormous black mass appeared in the half darkness of the room.

Altamont raised his arm ready to strike, when a well-known voice shouted: "For Heaven's sake, stop!"

"The Doctor! It's the Doctor!" exclaimed Johnson.

It was indeed the doctor who, toppled over by his own weight, had thus rolled into the room.

"Good morning, friends," he said, picking himself up nimbly.

His companions were thunderstruck, but their amazement soon gave place to delight; everyone wanted to shake hands with him at once; Hatteras, deeply moved, clapped him on the shoulder, and the doctor responded by gripping his hand.

"Is it really you, Dr. Clawbonny?" asked the boatswain.

"Yes, old friend, and I was more anxious about your fate than you could be about mine."

"But how did you know the bears were attacking us?" asked Altamont. "We were afraid of seeing you come back

unsuspiciously to Fort Providence without realizing the danger."

"Oh, I saw it all!" the doctor answered. "Your shots caught my attention, just as I was getting near the wreck of the *Porpoise*. I climbed on a hummock, and saw the five bears running after you; how anxious I was about you! When you slid down the hill, and I saw the animals hesitating for a moment, I knew you would have time to barricade yourselves in. So I gradually came along, sometimes crawling, and sometimes gliding between the icebergs; I got near the fort, and saw the enormous animals working like gigantic beavers, piling up blocks of ice—in fact, they were walling you up alive. It's a good thing they didn't think of hurling blocks from the summit of the cone, or you'd have been pitilessly crushed."

"But," said Bell, "you were none too safe yourself, Dr. Clawbonny; mightn't they have left us and gone after you?"

"They didn't think of it; the Greenland dogs that Johnson had let loose came up quite near them, and they took no notice; they thought themselves sure of more tasty food."

"Thanks for the compliment," laughed Altamont.

"Oh, that's nothing to be proud of! When I realized the bears' tactics I decided to join you. I had to wait until night for prudence sake, and as soon as twilight came I glided noiselessly towards the slope near the powder magazines. I chose the spot on purpose to bore a tunnel. I attacked the ice with my snow-knife—what a splendid tool it is; for three hours I hacked, I dug, I worked away. At last here I am, worn out and famished, but I'm here."

"To share our fate?" said Altamont.

"To save us all; but give me a bit of biscuit and some meat; I'm nearly dropping with hunger."

The doctor was soon gnawing a lump of salt meat. While eating he showed himself willing to answer the questions pressed upon him.

"To save us!" Bell had exclaimed.

"Of course," replied the doctor, making room for an answer by a vigorous use of his jaw muscles.

"Now Dr. Clawbonny's come we can escape by the same road," said Bell. "That's a fact."

"And give a free hand to that lot, who'll end by unearthing our stores and plundering them?" asked the doctor sarcastically.

"We've got to stay here," agreed Hatteras.

"Of course," the doctor answered, "and get rid of these animals as well."

"Is there any way to do it?" asked Bell.

"A certain way," replied the doctor.

"I told you that with Dr. Clawbonny nothing is hopeless," said Johnson, rubbing his hands. "There's always something in his knowledge box."

"Doctor," enquired Altamont, "can't the bears get into that tunnel you bored?"

"No, I took care to block the opening up firmly, and now we can get to the powder-magazine unknown to them."

"That's right. Now tell us how you're going to get rid of these absurd visitors."

"It's quite easy, and part of the work's done already."

"How?"

"You'll see; but I forgot I didn't come here alone."

"What do you mean?" asked Johnson.

"I've got a companion to introduce to you."

As he spoke the doctor dragged out of the tunnel the body of a newly killed animal.

"A fox!" cried Bell.

"I killed him this morning," the doctor replied modestly, "and it's a good thing I did."

"But what's your plan?" asked Altamont.

"I mean to blow up all the bears at once with a hundred pounds of gunpowder."

They stared at the doctor in astonishment.

"But where's the powder?" they asked him.

"In the magazine. This tunnel leads to it. I didn't dig it ten fathoms long for nothing. I could have begun on the wall nearer the house."

"But that mine, where are you going to make it?" asked the American.

"Right in front of our slope, at the farthest point from the house and the store and the magazine."

"But how will you attract all the bears at once?"

"Leave that to me," said the doctor. "Now enough talking; let's get to work. We've got a tunnel a hundred feet long to dig during the night; it's tiring work, but we five can manage it by taking turns. Bell will begin, and mean while we can get some rest."

"Well!" exclaimed Johnson. "The more I think of Dr Clawbonny's plan the better I like it."

"It's quite sure to work," replied the doctor.

"Oh, the moment you say so they're dead bears, and I can already feel their fur on my shoulder."

The doctor crawled into the dark tunnel and Bell followed him; where the doctor could pass, his companions could easily follow. The two miners reached the powder magazine, and emerged among the barrels, all arranged in order.

Having been given the necessary instructions to start on, the carpenter attacked the opposite wall, the one that joined the slope, while the doctor came back to the house.

Bell worked for an hour, and reached a depth of about ten feet. Then Altamont came to take his place, and in the same period he did about the same amount of work, the snow from the tunnel was carried into the kitchen, and the doctor melted it down so that it might take up less room. The captain followed the American, then Johnson. In ten hours, about eight in the morning, the tunnel was cut quite through.

At the first sight of dawn, the doctor went to watch the bears through a loophole he had made in the powder magazine.

The patient animals had not left the spot. There they were, roaming up and down and growling; they prowled round the house, which was disappearing under the blocks they were piling up. Then a moment came when their patience seemed exhausted, for suddenly the doctor saw them pushing back the ice-blocks they had heaped up.

"Good," he told the captain, who was standing beside him.

"What are they doing?" asked Hatteras.

"They look as if they want to destroy their own work, and they mean to get at us. But wait a minute and we'll destroy them; we've no time to lose."

The doctor crawled to the place where the mine was to be laid; there he enlarged the tunnel until it was almost the size of the slope; above it, the ice was left only about a foot thick and they had to fix supports to prevent its falling in. A stake was firmly driven into the ground, the fox's body was tied to its top, and a long cord, knotted to its base, led along the gallery to the powder magazine. The doctor's companions followed his instructions without understanding them.

"There's the bait," he said, pointing to the fox.

To the foot of the stake he rolled a small barrel holding about a hundred pounds of powder

"And here's the mine," he added

"But how shall we manage not to be blown up along with the bears?" asked Hatteras.

"We're far enough off from the scene of the explosion; besides, our house is solid, and if it gets a little shaken we can easily repair it"

"Good," said Altamont. "But how are you going to manage it?"

"By tugging on this cord we shall pull down the prop supporting the roof above the mine; then the fox's body will suddenly appear on the slope, and you'll agree that the animals, famished by a long fast, won't hesitate to throw themselves on their unexpected prey."

"Agreed."

"At that very moment, I'll fire the mine and blow up the guests and their meal."

"That's it! That's it!" exclaimed Johnson, who had been listening with the deepest interest.

Hatteras, having complete confidence in his friend, wanted no further explanation, but Altamont wished to know all about it.

"Doctor," said he, "how can you calculate the exact length of time your fuse will burn, so that the explosion will come just at the right moment?"

"It's very simple," said the doctor. "I shan't calculate at all."

"Then you've got a fuse a hundred feet long?"

"No."

"Are you going to make a powder-train?"

"No, that might missfire."

"Then someone will have to sacrifice himself and go and set fire to the mine?"

"If you want a volunteer," said Johnson eagerly, "I'm your man."

"That won't be necessary," said the doctor, shaking the old boatswain's hand; "our lives are all precious, and they'll all be spared, thank God!"

"Then," said the American, "I give up guessing."

"Look here," smiled the doctor. "If we can't get out of a fix like this, what's the good of learning physics?"

"Ah," Johnson beamed with delight, "physics!"

"Yes Haven't we got an electric battery and long enough wires—the ones we used for our lighthouse?"

"Well?"

"Well, we can set fire to the mine whenever we like, instantaneously, and without any danger"

"Hurrah!" cried Johnson.

"Hurrah!" repeated his companions, without caring whether their enemies heard them or not.

The electric wires were at once unrolled along the tunnel from the house to the mine. At one end they were connected to the battery and at the other they were fixed in the barrel a short distance apart.

By nine in the morning all was ready. It was time, for the bears were working furiously.

The doctor decided that the moment was come. Johnson was stationed in the powder-magazine, and given the task of pulling the cord fastened to the stake. He got ready.

"Now," the doctor told his companions, "have your weapons handy in case the besiegers aren't killed at once."

and stand by, Johnson; as soon as you hear the explosion, rush out."

"All right!" replied the boatswain.

"Now we've done all man can do! We've helped ourselves, now may Heaven help us!"

Hatteras, Altamont, and Bell went off to the powder magazine. The doctor stayed by himself beside the battery. Soon he heard in the distance Johnson's voice shouting: "Look out!"

"All ready!" he replied

Johnson gave the cord a violent pull and it dragged down the stake; then he rushed to the loophole and looked out.

The surface of the slope had sunk in and the fox's body had appeared on the surface. The bears, though at first surprised, were quick to throw themselves on their new prey.

"Fire!" shouted Johnson.

The doctor at once switched on the electric current; a terrific explosion followed, the house trembled as though in an earthquake; the walls began to split. Hatteras, Altamont, and Bell rushed out, ready to fire.

But their weapons were not needed, four of the five bears, blasted by the explosion, were falling here and there in fragments, unrecognizable, mutilated, blackened, while the fifth, half roasted, was running away at top speed.

"Hurrah! Hurrah! Hurrah!" cried the doctor's companions, as he came smiling to meet them.

CHAPTER XIV

POLAR SPRINGTIME

THE prisoners were free; they showed their delight by the warmth of their gratitude to the doctor. Johnson was inclined to regret his bearskin, burnt and unfit for use, but it did not affect his happiness.

The day was spent in repairing the snow-house, which had felt the effects of the explosion. The blocks of ice heaped up by the bears were cleared away and the walls were "repointed". The work went on quickly, while the boatswain cheered it with a song.

Next day the temperature changed suddenly, and the thermometer rose to 15° above zero. So great a difference had its effects on both men and things. The southern breeze brought with it the first indications of the Polar springtime. This comparative warmth lasted for several days; when sheltered from the wind the thermometer indicated 31° above zero; signs of a thaw began to appear. Crevices opened in the ice; jets of salt water sprang from the rocks like the waterfalls in an English park; some days later rain fell abundantly.

A thick mist rose from the snow; this was a hopeful sign, and the melting of these enormous drifts seemed near. The sun's pale disc deepened in colour, and traced longer spirals above the horizon; night lasted hardly three hours. Another sign, not less significant, was the appearance of flocks of ptarmigans, Arctic geese, plovers, and other birds; the air was filled with their deafening cries, which reminded the travellers of the previous spring. Hares, which were easy to hunt, appeared on the shore of the bay, and the tiny burrows of the Arctic mice perforated the ground.

The doctor pointed out that almost all these animals were beginning to lose their white winter fur or feathers.

to take to their summer clothing; they were visibly getting ready for the spring, while Nature was bringing forth their food in the form of mosses, poppies, saxifrage, and dwarf grass. A new life was emerging from the melting snow.

But with the harmless animals came their famished enemies, the foxes and wolves, in quest of their prey; lugubrious howlings could be heard during the short darkness of the nights. The wolf, of these countries is a very close relative to the dog; he barks and often the most experienced ears, even those of the dogs themselves, are deceived. This had been noticed at Hudson Bay, and the doctor confirmed it in New America. Johnson took care not to let his sledge dogs loose, lest they too might be taken in. As for Duk, he'd seen it all before, and he was too wary a dog to throw himself into the jaws of a wolf.

Supplies of fresh meat were abundant during the next fortnight; without having to go far from Fort Providence, the hunters shot partridges, ptarmigans, and snow-ortolans, which furnished a delicious addition to their food. The game seemed to come to meet their shots; their presence strangely livened up these silent shores and Victoria Bay took on an unfamiliar aspect, very cheering to the eye.

The fortnight that followed the struggle with the bears was filled by these varied occupations. The thaw progressed visibly, the thermometer going up to 32° above zero; torrents began to roar down the ravines, and thousands of cataracts sprang from the hill sides.

The doctor cleared about an acre of ground, and sowed cress, sorrel, and other antiscorbutics in it, their little green leaves were just showing above the ground when all at once, with inconceivable speed, the cold came back as the master of his empire. In one night, by a violent north wind, the thermometer sank nearly forty degrees to 8° below zero. Everything was frozen; birds, quadrupeds, and amphibians disappeared like magic; the seals' holes closed up, the crevices vanished, the ice once more became as hard as granite, and the cascades, frozen as they fell, hung in long

crystal stalactites. It was like a transformation scene, and happened during the night from 11th to 12th May. When that morning Bell put his nose outside in that terrible cold, he nearly left it there.

"Oh, boreal Nature!" cried the disappointed doctor. "This is worthy of thee! Never mind! I'll only have to sow my seeds over again."

Hatteras took things less philosophically, so anxious was he to resume his discoveries. But he had to resign himself.

"Will this weather last long?" asked Johnson.

"No," Clawbonny answered; "it is the cold's last grip! You see, he's at home here, and you can't expect him to be driven out without a struggle."

"He's certainly struggling," commented Bell, rubbing his face.

"Yes; but I ought to have foreseen it, and not sacrificed my grains like an ignoramus, for if I'd thought of it I could have grown them near the kitchen stove."

"What!" exclaimed Altamont. "You could have foreseen this change in the weather?"

"Yes, and without being a prophet! I ought to have put my seeds under the protection of what the French gardeners call the 'three icy saints' whose festivals are on the 11th, 12th and 13th of May."

"Really, Doctor," protested Altamont, "why should those saints affect the temperature?"

"Because there's an almost certain periodical return of cold in May, usually between the 11th and the 13th, that's all there is to it."

"That's queer, but can it be explained?" asked the American.

"Yes, in two ways: either because a greater number of the asteroids come between the sun and the earth at that season of the year, or simply because the melting of the snow absorbs much of the heat as it dissolves. Both suggestions are plausible, but are they correct! I don't know, but though I'm not certain of the explanation, I ought not to have forgotten the fact and jeopardized my garden."

The doctor was right: whatever the reason, the cold lasted for the rest of the month; hunting was held up not because of the temperature but because of the complete absence of any game. But, fortunately, the supply of fresh meat had not given out. The five men thus found themselves condemned to a fresh period of inactivity.

During the fortnight from the 11th to the 25th of May, their monotonous existence was interrupted by only one incident, the serious illness, of the carpenter, who was attacked with diphtheria; from his swollen tonsils the doctor could not mistake the nature of the terrible malady. But now Clawbonny was in his element, and the malady, which no doubt had not reckoned with him, was soon overcome. The treatment Bell followed was quite simple, and the remedy not far to seek; the doctor contented himself by putting little pieces of ice in the invalid's mouth. In a few hours the swelling began to lessen and twenty-four hours later Bell was on his feet again.

They were all astonished at the doctor's treatment. "This is the country for diphtheria," he explained; "it's not surprising that the remedy should be here with the disease."

"The remedy,—and especially the doctor," added Johnson, in whose mind Dr. Clawbonny began to assume gigantic proportions.

During their enforced leisure the doctor decided to have an important talk with the captain; he wanted to make him change his mind about going on northwards without a boat or a canoe or even a piece of wood on which to cross the bays or straits. Hatteras, so fixed in his prejudices, had vetoed the idea of using a ship made from the wreck of an American vessel.

The doctor scarcely knew how to begin, and yet he knew it would soon have to be decided for June was so near, and would bring the season for making long journeys. At last, after a long period of reflection, he took the captain aside, and said in his usual kindly style: "Hatteras, do you believe I'm your friend?"

"Certainly," the captain replied emphatically, "my best friend, and perhaps my only one."

"If I give you advice," continued the doctor, "advice you haven't asked for, will you regard it as disinterested?"

"Yes, for I know that personal interest has never swayed you; but what are you driving at?"

"Wait a minute, for I've another question to ask you. Do you believe that I am as good an Englishman and as ambitious for the glory of my country as you are?"

Hatteras stared at the doctor in surprise. "Yes," he answered, questioning him with a look.

"You want to get to the North Pole," the doctor continued; "I understand your ambition, and I share it; but if we want the end, we must have the means."

"Well, haven't I sacrificed everything so far to succeed?"

"No, Hatteras, you haven't sacrificed your personal prejudices, and even now you're ready to reject the indispensable means of reaching the Pole."

"Ah, you mean that man's boat——"

"Come, Hatteras, let's look at the matter dispassionately, and consider it in all its aspects. This coast on which we're wintering may not extend six degrees farther north; if the reports we've heard are true, we must find a vast extent of open sea. Now, in presence of that Arctic Ocean, devoid of ice, and easy to navigate, what shall we do if we haven't any means of crossing it?"

Hatteras did not reply.

"Do you like to find yourself a few miles from the Pole and not be able to reach it?"

Hatteras let his head fall into his hands.

"And now," the doctor continued, "let's look into the question from the moral point of view. I can understand that an Englishman might sacrifice his fortune and his life to bring further glory to England. But because a boat made of planks taken from an American ship, a useless wreck, will have reached the newly discovered land, or crossed the unknown ocean, how can that reduce the honour of the discovery? If you had found the hull of a derelict on this coast, would you have hesitated to use it? Isn't it only to the commander of an expedition that the honour of the discovery belongs? And I should like to know what

keeps a boat built by four Englishmen, and manned by four Englishmen, from being English from gunwale to keel."

Hatteras still kept silent.

"No," said Clawbonny; "let's be frank—it isn't the boat you object to, it's the man."

"Yes, Doctor, yes," answered the captain. "I hate that American with an Englishman's hatred, that man whom fate has thrown in my road——"

"Just to save you!"

"Just to thwart me! He seems to be defying me, to regard himself as the master here, to think that my destiny is in his hands, and that he's guessed my plans. Didn't he come out in his true colours when we talked about naming these new lands? Has he ever admitted what he came here for? You can't get out of my mind an idea that's driving me frantic, that he is the commander of an exploring expedition sent out by the United States Government!"

"And suppose he is, does that prove that he was trying to reach the Pole? America, like England, might be seeking for the North-West Passage. Anyway, Altamont knows nothing of your plans, for neither Johnson, nor Bell, nor you, nor I, have said a word about them before him."

"Well, let him go on not knowing about them!"

"He will have to end it by knowing them, for we can't leave him here alone."

"Why not?" the captain asked somewhat angrily. "Can't he stay at Fort Providence?"

"He would never consent, Hatteras, besides, how could we abandon him here, when we're not certain of finding him here when we get back? It would be more than imprudent, it would be inhuman. Altamont will come; he'll have to come! But as there's no point in giving him ideas he hasn't got already, we'll tell him nothing, and we'll simply build a boat that looks as if it's meant to explore the coast."

Hatteras could not bring himself to admit that the doctor was right, and Clawbonny waited for an answer that did not come.

"And if that man won't agree to have his ship broken up?" the captain demanded at last.

"In that event you'll have right on your side; you'll build the boat whether he agrees or no."

"Heaven send that he'll refuse!" exclaimed Hatteras.

"Before he can refuse we've got to ask him; I'll do that."

That very evening, at supper, Clawbonny led the conversation on to their plans for the summer, for learning the hydrography of the coast.

"You'll come with us, I suppose?" he asked Altamont.

"Certainly," the American answered. "We've got to know how far New America extends."

As his rival spoke, Hatteras looked hard at him.

"And for that," added Altamont, "we must do the best we can with the remains of the *Porpoise*: we must build a good stout boat with them."

"You hear that, Bell?" the doctor said. "We'll get to work on it at once."

CHAPTER XV

THE NORTH-WEST PASSAGE

NEXT day Bell, Altamont, and the doctor went down to the *Porpoise*; there was no shortage of wood; the old three-master, though crushed by the pressure of the icebergs, might still supply the principal parts of the new boat. The carpenter set to work at once; they must have a vessel which could put to sea, and yet be light enough to carry on the sledge.

During the last few days of May the temperature rose above freezing point. This time spring came for good, and the men had to shed their winter garments. Rain often fell, and snow began to take advantage of the inequalities in the ground to flow away in waterfalls and cascades.

Hatteras could not contain his satisfaction at seeing the ice-fields give the first signs of the thaw. An open sea—for him it was freedom. Whether his predecessors were mistaken or not on the important great question of a Polar Basin was what he hoped soon to know, for on this depended the success of his enterprise.

One evening, after a rather warm day, during which the breaking up of the ice-fields was manifest, he led the conversation to this fascinating subject of the open sea. He again went over the arguments so familiar to him, and as usual he got hearty support from the doctor; moreover, his inferences were not unreasonable.

"It's quite clear," he said, "that if the ocean frees itself from ice off Victoria Bay, its southern waters must be open as far as New Cornwall or Queen Channel. Penny and Belcher both saw it open."

"I agree with you, Hatteras," the doctor answered, "and we can't doubt the evidence of these experienced sailors; people have vainly tried to explain their discovery as due to a mirage; but they were too definite not to be sure."

"I've always thought so, too," agreed Altamont; "the Polar Basin extends not only to the west but to the east as well."

"We certainly might think so," replied Hatteras.

"We have to think so," continued the American, "for that open sea which Penny and Belcher saw off Grinnell Lane, Kane's lieutenant, Morton, also noticed in the strait that is called after Kane."

"We're not in Kane Strait," Hatteras pointed out coldly, "so we can't verify that."

"It's quite likely, at least," said Altamont.

"Certainly," replied the doctor, who wanted to avoid a useless argument. "What Altamont says is very true, for both these regions have the same peculiarities and they're in the same latitude, so they must produce the same result. I, too, believe there is an open sea both east and west."

"Anyhow, it doesn't matter much to us!" exclaimed Hatteras.

"I don't agree, Hatteras," said the American, whom the captain's assumed indifference was beginning to annoy, "it may be very important for us."

"And when, may I ask?"

"When we start thinking about coming back."

"Coming back?" cried Hatteras. "Who's thinking about that?"

"Nobody," Altamont replied, "but we shall have to stop somewhere, I suppose."

"Where?" asked Hatteras.

This was the first time the question had been asked point-blank. The doctor would have given one of his arms to cut the discussion short. Altamont did not answer, and the captain repeated the question.

"Where's that?" he insisted.

"Where we're going," the American answered calmly.

"And who knows where that will be?" asked the conciliatory doctor.

"So I say," continued Altamont, "that if we want to take advantage of the Polar Basin to get back by, we might try

to reach Kane Strait: that's the more direct route to Baffin Bay."

"You think so?" asked the captain ironically.

"I think so, just as I think that if ever these northern seas get practicable, that will be the way to them because it's the most direct. Oh, it was a great discovery, that of Dr. Kane!"

"Indeed!" said Hatteras, biting his lips till the blood came.

"Yes," said the doctor, "we cannot deny that, and we must give honour where honour is due"

"Besides," the American continued obstinately, "nobody else has ever got so far north as Kane."

"I am glad to know that at last Englishmen have got farther!"

"And Americans too!" exclaimed Altamont.

"Americans!" replied Hatteras

"Yes," Altamont said proudly. "What am I, then?"

Hatteras could scarcely contain himself. "You," he answered, "you're a man who gives chance as much honour as science. Your American captain got a long way north, but only chance——"

"Chance?" exclaimed Altamont. "You dare to say that Kane did not owe his great discovery to his own energy and skill?"

"I say that the name of Kane is not a name to utter in the country made illustrious by Parry, Franklin, Ross, Belcher, and Penny, in the seas which opened the North-West Passage to the Englishman McClure."

"McClure!" answered the American. "You mention that man, and yet you won't allow anything to chance? Wasn't it chance alone that favoured him?"

"No," answered Hatteras warmly. "No. It was his courage, his determination, that made him spend four winters in the ice."

"I dare say," replied Altamont, "he was frozen in, he couldn't come back and he finished up by abandoning his ship the *Investigator*, to get home to England."

"Friends——" put in the doctor.

"Besides," Altamont interrupted him, "let's leave the man and see the result. You're talking about the North-West Passage; it hasn't yet been found."

Hatteras started at that phrase. No more controversial question could have arisen between two rival nationalities.

The doctor tried to intervene.

"You're wrong, Altamont," he said.

"No, I'm not," the obstinate man repeated. "I stick to my guns. The North-West Passage is still to be found—to be traversed if you like that better. McClure did not sail along it, and to this day no vessel has ever left Behring Straits and reached Baffin Bay."

Hatteras got up: "I won't allow the glory of an English captain to be attacked any more in my presence."

"You won't allow!" replied the American, as he too got up; "but the facts are there and they speak for themselves, and you've no power to destroy them."

"Sir!" Hatteras turned pale with anger.

"Friends, let's keep our heads," put in the doctor; "we're discussing a scientific point." He didn't want to see whether it were really a scientific question or one of the mutual hate of the English and the Americans.

"I'll tell you the facts," continued Hatteras, now deaf to all remonstrance, and with a threat in his voice.

"And I'll answer them!" replied the American.

Johnson and Bell did not know where to turn.

"Gentlemen," said the doctor authoritatively, "let me speak; I must," he continued, "for I know the facts as well as you—better than you—and you will grant that I can speak impartially."

"Yes!" cried Bell and Johnson, who were getting uneasy at the turn the discussion had taken, so giving the doctor a favourable majority.

"Go on, Dr. Clawbonny," added Johnson, "the gentlemen will listen to you, and we'll all learn from it."

"Tell us, then!" said the American.

Hatteras sat down with a sign of assent and folded his arms.

"I'll tell you the facts just as they were," the doctor

began, "and if I alter or omit a detail you must correct me."

"We've got complete confidence in you, Dr. Clawbonny," answered Bell, "so go ahead and don't be afraid."

"Here's the map of the Polar Seas," continued the doctor, who had got up to look for his evidence; "it will be easy to follow the navigation of McClure, and you'll know enough to judge."

The doctor spread out on the table one of the excellent maps published by the Admiralty and containing the most modern discoveries made in the Arctic regions; then he described McClure's achievement in some detail.

In 1850, he explained, McClure, commanding the *Investigator*, had cruised northwards through Behring Straits, declaring his intention either of rescuing Franklin or of discovering the North-West Passage. Then he turned eastwards through waters almost unknown; after sighting Cape Bathurst he had discovered Baring Land, which he found later was part of Banks Land and Prince Albert Land; then he determinedly followed the long strait between them, which he named after the Prince of Wales. He was unable to reach Melville Sea, as he hoped, but while wintering in the ice he crossed it afoot to make certain that the Prince of Wales Strait actually led to it, and his men explored the neighbourir coasts.

In the first thaws of the following July McClure again tried to reach Melville Sea, and he had got within twenty miles of it when the wind forced him southwards. So he decided to go back down the straits and round Banks Land, to see if he could do on its west what he had failed to do on its east. He passed Cape Kellett and Cape Prince Alfred two degrees farther north; then, after a terrible struggle with the icebergs, he wintered, for the second time, in Mercy Bay on the north coast of Banks Land.

Though by the April of 1852 he had only eighteen months' food, he refused to turn back. Crossing Banks Strait by sledge, he reached Melville Island, where he hoped to find another expedition, which had been sent to meet him by way of Baffin Bay and Lancaster Strait. On the 28th

he touched Winter Harbour, the very point where Parry had wintered thirty-three years before. But a message left in a cairn told him that the other expedition had already left, so he placed with it another document, announcing his intention of returning to England by the North-West Passage he had discovered through Lancaster Strait and Baffin Bay. But the wind had driven him beyond Melville Island; undiscouraged, he returned to Mercy Bay to spend his third winter, that of 1852 to 1853.

"I never questioned his courage," Altamont put in here, only his success."

"But notice this," Clawbonny told him, "that if you compare Parry's discoveries with McClure's you'll find that the whole of the north coast of America has been rounded."

"Not by one ship," Altamont protested.

"No, but by one man," the doctor replied. "But let me continue."

In April 1853 an exploring party from another ship, the *Herald*, reached McClure, who afterwards made a journey of 170 miles across the ice, from Mercy Bay to Winter Harbour, in twelve days. Captain Kellett, commander of the *Herald*, agreed to take back to Britain a number of casualties from the *Investigator*, and they were escorted across the ice to Winter Harbour by one of McClure's officers, Lieutenant Cresswell, who then pushed on another 470 miles across the ice to Beechey Harbour. He reached it on 2nd June, and a few days later he was taken, with twelve of his men, on board the *Phoenix*.

"I was serving on her then," said Johnson, "with Captain Inglefield, and we got back safely to England."

"And on 7th October, 1853," continued the doctor, "Cresswell arrived in London, after having traversed the whole distance from Behring Strait to Cape Farewell."

"Well," asked Hatteras, "doesn't going in on one side and coming out at the other mean traversing it?"

"Yes," replied the American, "but by going 470 miles across the ice."

"Well, what does that matter?"

"Everything; did McClure's ship actually traverse the passage?"

"No," answered the doctor, "for after wintering a fourth time, McClure had to abandon her in the ice."

"Well, in a sea-voyage, a ship and not a man will have to do it. If ever the North West Passage becomes practicable, it must be for ships and not for sledges; or, if not ships, for a long-boat at least."

"A long-boat!" exclaimed Hatteras, who saw plain intention in the American's words

"Altamont, you're making a childish distinction, and we all say you're wrong," the doctor made haste to say.

"That won't be hard, gentlemen, for you're four against one. But that does not keep me from having my own opinion."

"Keep it to yourself, then!" cried Hatteras. "We don't want to hear it."

"What right have you to talk to me like that?" cried the American furiously.

"My right as captain!" replied Hatteras.

"Am I under your orders?" asked Altamont.

"Certainly you are, and if——"

Here the doctor, Johnson and Bell interfered. It was time, for the two enemies were squaring up to one another. The doctor felt grieved to the heart.

But, after a few conciliatory words, Altamont went to bed whistling his national air, "Yankee Doodle," and whether he slept or not, he did not say anything else.

Hatteras went out of the tent and strode up and down outside. He did not come in till an hour later, and he too turned in without having uttered a word.

CHAPTER XVI

THE ARCTIC ARCADIA

ON 29th May, for the first time, the sun failed to set; its disc just grazed the horizon and then rose again; the season for days twenty-four hours long had begun. Next day the radiant orb appeared surrounded by a magnificent halo, a circle shining with all the colours of the rainbow. Such phenomena, though frequent, always attracted the doctor's attention; he never forgot to note their date, character, extent, and appearance, the one he saw that day was elliptical, a type about which not much is yet known.

Soon the screaming bud population returned; flocks of bustards and Canada geese, coming from the distant lands of Florida or Arkansas, sped north with astonishing speed and brought the spring under their wings. The doctor shot a few, as well as three or four early cranes, and even a solitary stork.

On all sides the snow melted under the influence of the sun; the salt water, spreading over the ice field from the crevices and the holes made by the seals, hastened its decomposition; mixed with the sea water, the ice formed a sort of dirty paste, which Arctic navigators call slush. Large pools formed themselves on the ground beside the bay and the unburdened land seemed to vegetate like a boreal spring.

The doctor then went back to his garden. He had plenty of seed and sowed some cress, three weeks later the young shoots were already an inch long. He was much surprised to see a sort of sorrel growing wild between the rocks, and he admired the creative force of Nature which asks for so little to show itself.

The heath then began to display its little pale pink flowers—a pink in which a “prentice hand” seemed to have put too much water. Yet the flora of New America left much

to be desired; but even that rare and timid vegetation was pleasant to see; it was all that the feeble rays of the sun could produce, a last reminder that Providence had not completely forgotten these far-off lands.

At last it began to get really warm; on 15th June the doctor noticed that the thermometer marked 57° above zero. He could scarcely believe his eyes, but he had to yield to the evidence. The country was transformed; innumerable noisy cascades fell from all the sun-caressed summits; the ice broke up, and the important question of the open sea was at last going to be settled. The air was filled with the roar of avalanches falling from the hilltop to the depths of the ravines, and the cracking of the ice-fields merged into a deafening roar.

The explorers went as far as Johnson Island; this was really only an unimportant islet, but the old boatswain was none the less delighted to have given his name to these few rocks lost in the seas. He even wanted to cut it on a tall rock at the risk of breaking his neck.

Hatteras had carefully surveyed the land up to and beyond Cape Washington during his earlier explorations, the melting of the snows had noticeably altered the country; ravines and hills now appeared where the vast carpet of snow had seemed to cover unbroken plains.

The house and the stores threatened to melt, and they often had to be repaired; fortunately temperatures of 57° are rare in these latitudes, the average being just above freezing-point.

Towards 15th June, the long-boat began to look ship-shape. While Bell and Johnson were building it, some very successful hunts were organized. Several reindeer were bagged, though these animals are very difficult to stalk. Altamont profited by the method used by the Indians of his own land; he crawled on the ground, moving his rifle and arms so as to make them look like the horns of one of these wary quadrupeds, till he got near enough to be certain of his aim.

But the finest game of all, the musk-ox which Parry found in herds on Melville Island, did not seem to frequent

the shores of Victoria Bay: a long journey was decided upon, as much to hunt the precious animal as to survey the land to the east. Hatteras did not mean to reach the Pole by that part of the country, but the doctor was not sorry to have a general idea of it, so they decided to make for a point east of Fort Providence. Altamont hoped for some hunting, and Duk naturally went with them.

They set out on 11th June in fine weather, with the thermometer at 41° . The air was calm and clear, and the three sportsmen, each armed with a double-barrelled gun, an axe, a snow-knife, and followed by Duk, left Doctor's House at six in the morning; they were equipped and provisioned for a journey that might last two or three days.

At eight Hatteras and his two companions had covered about seven miles, but no living creature had come to ask for a shot, and the hunt threatened to become a country walk. This region consisted of vast plains which extended out of sight; many newly formed brooks furrowed them, and great pools, as still as artificial lakes, mirrored the oblique rays of the sun. The melting of the covering of ice exposed a soil belonging to the great division of sedimentary rocks so widely spread over the surface of the earth.

Some erratic blocks were of a nature foreign to the soil, and their presence was difficult to explain; but slaty schists and the varied products of limestone rocks were met with in abundance, especially some strange transparent colourless crystals, showing the peculiar refractive powers of Iceland spar.

But although he was not hunting, the doctor had no time to turn geologist; his companions hurried him on too rapidly. However, he studied the ground and talked as much as possible, for without him complete silence would have reigned among them. Altamont did not want to talk to the captain any more than the captain wanted to speak to the American.

Towards ten the sportsmen had gone about a dozen miles eastward; the sea was hidden below the horizon; the doctor suggested a halt for breakfast. The meal was quickly

eaten, and half an hour later they set out again. The ground was then sloping gently downwards; a few patches of snow looked like sheep or waves foaming in the open sea under a strong breeze. The country consisted of a plain, without vegetation, that no living thing seemed ever to have frequented.

"Certainly," Altamont told the doctor, "we're having no luck in our hunting. I agree that animals wouldn't find much to eat here, but in the Arctic game has no right to be so fussy—it ought to be more obliging."

"Don't despair," the doctor answered; "the summer season has hardly begun, and if Parry met with so many animals in Melville Island, there's no reason why we shouldn't find them here."

"But we're farther north," put in Hatteras.

"Certainly, but in this respect north is only a word; you must take into account the Pole of Greatest Cold, that immense stretch of ice where we wintered with the *Forward*. As we get higher we get farther away from the coldest parts of the globe, so we ought to find above it what Parry, Ross, and the others found below."

"Well," said Altamont with a sigh of regret, "till now we've been travellers, not hunters."

"Patience," the doctor told him, "the country is gradually changing and I should be surprised if game should fail us in the ravines where vegetation has managed to spring up."

"You must admit," said Altamont, "that the country we're crossing is quite uninhabited and quite uninhabitable."

"Oh, uninhabitable is a big word," answered the doctor; "I don't believe in a country's being uninhabitable; by great effort, generation after generation, and with all the resources of agricultural science, man could make even this country fertile."

"You think so?" asked Altamont.

"Certainly! If you were to go to the countries so celebrated in the world's infancy, to the sites of Thebes, or Nineveh, or Babylon, in our forefathers' fertile valleys,

you would think it impossible that men ever could live in them; even the atmosphere has become vitiated since human beings disappeared. It's the general law of nature that makes the countries we do not live in, or have ceased to live in, become unhealthy and sterile. You must realize that man makes his own country, by his presence, his habits, his industry; and, I may even add, by his breath; little by little he modifies the exhalations from the soil and the atmospheric conditions, and he makes the air healthier at the same time that he breathes it! There are uninhabited countries, yes—but uninhabitable, never."

As they talked, the sportsmen, now become naturalists, went on and reached a sort of valley, at the bottom of which wound a river free from ice, its exposure to the southern sun had brought out a scanty vegetation on its banks. The soil seemed to be anxious to yield: a few inches of vegetable mould would have made it fertile. The doctor explained this to his companions.

"Look," said he, "couldn't some enterprising colonists settle down in this ravine? With industry and perseverance they would make it quite different—not the country of temperate zones, I don't say that, but a presentable land. Why, unless I am mistaken, here come some of its four footed inhabitants! The rascals know the best place to come to."

"Those are Polar hares," explained Altamont, loading his gun.

"Wait," cried the doctor, "wait a minute, you fanatical sportsman. The poor animals don't dream about running away. Look, leave them alone; they're coming over to us."

Three or four hares, leaping about among the scanty heather and the new-grown moss, came up to the three men, whose presence they did not seem to fear in the least; but even their charming ways hardly disarmed Altamont.

They were soon rubbing against the doctor's legs, and he petted them, saying, "We can't give them a bullet when we're asked for a caress. To kill these little beasts won't do us any good."

"You're quite right, Doctor," answered Hatteras; "we must let them live."

"Look at those ptarmigans flying towards us," exclaimed Altamont, "and those sand-pipers on their long legs like stilts!"

A whole feathered tribe, unsuspecting of the danger which the doctor's presence had averted, was coming up to meet the sportsmen. Even Duk stood still, seemingly lost in admiration. It was a strange and touching spectacle to see these charming creatures running, leaping, and fluttering about without fear; they perched on the shoulders of the good doctor, and lay down at his feet; they courted his unaccustomed caresses, and seemed to do all they could to welcome their unknown guests. They made him look like an animal charmer.

The hunters, accompanied by the birds, were ascending the wet banks of the brook, when in a turn of the valley they perceived a herd of eight or ten reindeer, eating lichens half buried in the snow. The calm, graceful creatures were delightful to behold, with their many-pointed antlers, which the female wears as proudly as the male; their skins, which had a woolly look, had already put off their winter whiteness for their summer grey and brown; and they seemed no more frightened and no less tame than the hares and birds of this land of peace. Such, surely, must have been the relations between the first men and the first animals in the world's youth

• The sportsmen walked right into the herd without their trying to get away. But now the doctor had much trouble in restraining Altamont's instincts; the American could not look calmly on such magnificent game without the hunter's blood mounting to his head. Hatteras was moved with compassion as he watched these gentle animals, who came and rubbed their muzzles on the clothing of the doctor, the friend of all living things.

"But," protested Altamont, "didn't we come here to hunt?"

"Yes, the musk-ox," replied Clawbonny, "but nothing else; we shouldn't know what to do with all this game;

we've got plenty of food as it is; let's enjoy this touching spectacle of man mixing with animals without filling them with fear."

"That proves they've never seen men before," commented Hatteras.

"Clearly it does," replied the doctor; "and from this we can conclude that these animals are not of American origin."

"And why not?" asked Altamont.

"If they had been born on the coasts of North America they would know what to think of that two-legged two-handed creature called man, and at the mere sight of us they'd certainly have run away! No, it's more likely that they came from the north, from these unknown Asiatic lands which creatures like us have never visited. So, Altamont, you can't claim them as your compatriots."

"Oh," replied Altamont, "a sportsman does not think about that, and game always belongs to the country of the man who kills it."

"Now, calm down, my gallant Nimrod! For my part I would rather give up firing a gun for the rest of my life than throw terror into this charming population. Look, Duk himself is fraternizing with the lovely beasts. Believe me, kindness is strength, so let's be kind so long as we can."

"Well, do as you like," agreed Altamont, who did not at all understand the doctor's tenderness; "but I should like to see what you'd do among a pack of wolves with kindness as your only weapon."

"Oh, I don't pretend to charm wild beasts," the doctor answered; "I don't much believe in the magic of Orpheus; anyhow, bears and wolves wouldn't flock round us like these hares and partridges and reindeer."

"Why not," asked Altamont, "if they'd never seen any men before?"

"Because such animals are naturally ferocious, and ferocity, like wickedness, produces suspicions; it is a something that has been noticed about men as well as about

animals. Who says wicked says wary, and fear comes easily to those who arouse it."

All that day was spent in the ravine, which the doctor wanted to call the Arctic Arcadia. After a supper which had not cost the life of any of the inhabitants of the country, the three sportsmen slept in the hollow of a rock that looked as if it had been scooped out on purpose to give them a comfortable shelter.

ALTAMONT'S REVENGE

NEXT day the doctor and his two companions awoke after a night of perfect calm. The cold had made itself felt at the approach of morning, but they were well wrapped up and had slept deeply, watched over by the peaceful animals.

The weather still kept fine, and they decided to devote that day to surveying the country, and to looking for the musk-ox. They had to give Altamont the chance of a little sport, and it was agreed that even should these be the quietest animals on the world, he should still have the right to open fire on them. Their flesh, though strongly impregnated with musk, makes savoury food, and the sportsmen looked forward to taking some fresh meat back to Fort Providence.

For the first part of the morning the journey offered nothing unusual. To the north east the country was already beginning to look different. inequalities in the ground gave the first suggestions of mountainous country. If New America were not a continent, it must at least be a large island; but they were not concerned with verifying that geographical problem.

Duk ran on before them, and before long he "pointed" the track of some musk ox; he rushed ahead and was soon out of sight. The men were guided by his loud, clear barking, which announced that the faithful dog had at last discovered what they wanted.

They hurried on, and after an hour and a half found themselves in the presence of two large formidable looking animals. These strange quadrupeds seemed surprised by Duk's attack without being afraid of it; they were eating a sort of pink moss which carpeted the soil. The doctor recognized them at once by their horns, which were broad at the base, by their strange absence of muzzle, and by

their short tails; their build has induced the naturalists to give them the name of "ovibos", a composite word indicating the two species of animals they belong to. They were covered both with a long thick fur, and with a fine brown silk hair.

At the sight of the sportsmen the animals ran away and the three men hurried after them as fast they could. But it was difficult for anyone to reach them when half an hour's running put them completely out of breath. Hatteras and his companions halted.

"The devil!" exclaimed Altamont.

"Devil's the very word," replied the doctor as soon as he could draw breath. "I'll concede that these animals are Americans; they do not seem to have a very flattering opinion of your compatriots."

"That shows we're good hunters," said Altamont.

When the animals saw that they were no longer being chased, they stopped as though perplexed; as it was quite clear that they could not outrun them, the hunters decided to hem them in: the plateau they were on facilitated this. So, leaving Duk to harass the animals, they went down into the near-by ravines to go round the plateau. Altamont and the doctor hid themselves behind a rock at one end, while Hatteras was to go to the far end, appear unexpectedly on the plateau and drive the animals towards them.

In half an hour's time they were at their posts.

"This time you won't object to our giving the beasts a shot?" enquired Altamont.

"No, it's a fair fight," answered the doctor, who in spite of his habitual kindness was a sportsman at heart. They were still talking when they saw the two musk-ox take alarm, with Duk at their heels; farther on, Hatteras, shouting loudly, was driving them towards his comrades, who dashed forward to meet their magnificent prey.

The oxen at once stopped, and, less frightened by a single enemy, turned back upon Hatteras. He stood his ground to meet them, took aim, and fired at the nearest. The bullet hit it in the middle of the forehead, but did

not stop its rush. A second shot only made the beasts furious; they threw themselves on the huntsman and had him down in a moment.

"He's lost!" exclaimed the doctor.

But while Clawbonny was uttering these words in tones of despair, Altamont started to go to Hatteras's help. Then he stopped, struggling against himself and against his prejudices.

"No," he cried, "that would be dastardly!" and he rushed forward with Clawbonny to the scene of the struggle.

His hesitation had not lasted half a second. But if the doctor saw what was passing in the American's mind, Hatteras also understood it—he who would rather have let himself be killed than have implored his rival's intervention. He had scarcely time to think of this, however, when he saw Altamont appearing above him.

Hatteras, sprawled on the ground, was trying to ward off the hooves and horns of the two animals; but so unequal a struggle could not have lasted long. He was on the point of being torn to pieces when he heard two shots and felt the bullets grazing his head.

With a shout, Altamont flung aside his empty rifle and threw himself on the enraged animals. One of the oxen, hit in the heart, collapsed in a heap; the other, in the height of its fury, was going to rip up the wretched captain when Altamont appeared in front of it and plunged his hand grasping the snow-knife into its open jaws; with the other hand he split open its head with a terrible blow of his axe.

All this happened with marvellous speed—a flash of lightning would have sufficed to reveal the whole scene. The second ox reared up on its haunches and fell dead.

"Hurrah! Hurrah!" shouted Clawbonny.

Hatteras was saved, and he owed his life to the man he detested most in the world. What passed in his soul at that moment? What kindly thought arose that he could not suppress? That is one of the secrets of the heart which eludes analysis. Without hesitation he went towards his rival and said gravely: "Altamont, you've saved my life."

"You saved mine first," replied the American. There was a moment's silence, then he added, "Hatteras, we're quits."

"No, Altamont," the captain answered; "when the Doctor pulled you out of your icy tomb I didn't know who you were. But, knowing who I am, you have saved my life at the risk of your own."

"You are a fellow-creature," replied Altamont, "and no American, whatever else he may be, is a coward."

"No, indeed," exclaimed the doctor, "he is a man——Hatteras, he's a man like you!"

"And, like me, he shall share in the glory destined for us!"

"The glory of reaching the North Pole?" asked Altamont.

"Yes," said the captain proudly.

"My guess was right, then!" exclaimed the American. "So you really dared to make such a plan to try to reach that inaccessible place! That's fine, that is! I say it's magnificent!"

"Then," Hatteras asked urgently, "you didn't set out, as we did, for the Pole?"

Altamont seemed to hesitate.

"Well?" the doctor pressed him.

"Well, no!" replied Altamont. "Truth before everything! No, I never had that splendid idea that brought you so far; I was trying to get my ship through the North-West Passage, that's all."

"Altamont," replied Hatteras, stretching out his hand, "be our companion in glory, and come with us to discover the North Pole!"

The two men exchanged a cordial hand-shake.

When they turned towards the doctor they saw he had tears in his eyes.

"Oh, friends," he said, as he dried his eyes, "how happy you have made me! My comrades, you have sacrificed that wretched question of nationality to unite in a common cause. You have told yourselves that England and America have nothing to do with it and that a cordial sympathy ought to unite us against the dangers of our expedition. If the North Pole is reached, what does it matter who

discovered it? Why be proud of being Americans or English when we can be proud of being men?"

The good doctor gripped the hands of the erstwhile enemies; he could not restrain his joy. The two new friends felt themselves even more closely united by the friendship which he felt for both of them, as he spoke of the vanity of the competitive spirit, of the folly of national rivalries, and of the good understanding so necessary to men situated as they were. His words, his tears, his gestures, came from the depths of his heart.

After twenty hand-shakes with his two friends he at last grew calm. "And now," he said, "let's get to work! As I'm no good as a sportsman, let's use my other talents."

And he began to cut the animal up—he called it "the ox of the reconciliation"—but so skilfully that he looked like a surgeon performing a delicate autopsy.

His friends smilingly watched him. In a few minutes the skilled practitioner had taken about a hundred pounds of appetizing meat from its body. He divided it into three parts; they each took one and set out back to Fort Providence.

At ten in the evening, travelling in the oblique rays of the sun, they reached Doctor's House, where Johnson and Bell had prepared a good meal for them.

But before going to the table the doctor exclaimed triumphantly, as he indicated his two companions: "You know, my friends, that I took an Englishman and an American out with me, didn't I?"

"Yes, Dr. Clawbonny," replied the boatswain.

"Well, I've brought back two brothers."

The sailors shook hands joyfully with Altamont; the doctor told them what the American captain had done for the English captain, and that night the snow-house sheltered five truly happy men.

CHAPTER XVIII

FINAL PREPARATIONS

NEXT day the weather changed, the cold returned, and the snow and rain alternated for several days. Bell had completed his boat, which was perfectly adapted to its purpose. It was partly decked in and had a high freeboard, so that it could put to sea in bad weather under mainsail and jib, but it was light enough to be hauled on the sledge without overburdening the dogs.

At last a change extremely important for the winterers occurred in the condition of the Polar basin. Towards the middle of the bay the ice began to break up; the taller bergs, continually undermined by the shocks, were only waiting for a heavy tempest to drift away from their moorings.

But Hatteras would not wait for the ice to break before he began his journey. As they were going by land, it did not much matter whether the sea was open or not, so he fixed their departure for 25th June, by which date all their preparations could be complete.

Johnson and Bell then set about putting the sledge into working order; the framework was strengthened and the runners repaired. The travellers wanted to take advantage of the few weeks' fine weather that Nature grants to the hyperborean countries: when sufferings less cruel have to be faced and obstacles are easier to overcome.

Some days before their departure, on 20th June, the icebergs left some of the leads open, and advantage was taken of these to test the boat as far as Cape Washington. The sea was not fully open, but it no longer presented a solid surface, and it would have been impossible to try to cross the broken ice fields afoot.

The half-day's travel enabled the boat's good qualities to be realized.

On their return the navigators witnessed a curious incident, the capture of a seal by a gigantic bear. The latter was, fortunately, too fully occupied to notice the boat, for it would not have failed to attack her. It was lying in wait by a crevice in the ice-field, into which the seal must have dived, and was watching for its reappearance with the patience of a hunter or an angler. It watched silently; it never moved and made no sign of life.

But suddenly the surface of the water in the hole began to move as the amphibian came up to breathe. The bear stretched itself out on the ground with its two paws round the crevice. After an instant, the seal reappeared and put its head out of the hole. It had no time to dive back, the bear's paws, as though worked by a spring, gripped the animal with irresistible strength and hauled it right out of its chosen element.

Then followed a short struggle; a few minutes later the seal was stifled against its adversary's breast. At last the bear carried it off effortlessly, large though it was, leaping from ice block to ice block until it reached the land, it disappeared with its prey.

"Happy journey," Johnson shouted after it. "That animal has rather too many paws to suit me," and the boat soon regained the little creek that Bell had hacked out in the ice.

Four more days separated Hatteras and his companions from the date fixed for their departure. The captain hurried on the last preparations, anxious to leave New America the land which did not belong to him, which he had not named and where he did not feel at home.

On 22nd June they began to load the sledge with the camping equipment, the tent and the stores. They took 200 pounds of salt meat, three cases of preserved vegetables and meat, six quarters of flour, a supply of lime juice and other antiscorbutics as well as cress from the doctor's garden. With 200 pounds of powder, scientific instruments, weapons and oddments, the new boat, the hallett boat, and the sledge, it made a weight of about 1500 pounds to be hauled.

This was a heavy load for four dogs; and the more tiring because instead of working in relays of four days, like those of the Esquimaux, they would have to work continually. But the travellers meant to help when necessary, and to keep each day's journey short. The distance from Victoria Bay to the Pole was only 355 miles at most; if they did twelve miles a day it would take a month to cross it: when land failed, the boat would enable them to complete the journey without fatigue either to dogs or men.

All were in splendid condition; their health was excellent although the winter had been hard, it had ended well and the doctor's advice had protected them from the maladies inherent in the climate. They had grown a little thinner, which delighted Clawbonny; but they had now become used in body and spirit to their harsh existence, and were sufficiently acclimatized to face the greatest trials of fatigue or cold without giving in.

Moreover, they were now bound for their goal, after which all they would have to do would be to get back. The sympathy which now united them would enable them to accomplish their audacious project, and not one of them doubted its success.

The doctor advised them to get into training well ahead. "I don't ask you," he told them, "to imitate the English runners who lose eighteen pounds after two days' training, and twenty-five after five, but we must do a little to get into the best possible condition for so long a journey. The first principle of training, for the runner as for the jockey, is to get thinner, and the results are almost incredible. People who couldn't run a mile without losing their breath before they went into training could easily do twenty-five afterwards. Townsend is said to have run a hundred miles in twelve hours without stopping."

"That was fine," said Johnson, "and although we're not so very fat, if we have to get thinner still——"

"There's no need for that, but, without exaggerating, it can't be denied that it's good to get into training; it gives more resistance to the bones, more elasticity to the muscles,

more keenness to the hearing, and more clearness to the sight."

Trained or otherwise, the travellers were ready on 23rd June; it was Sunday, and the day was consecrated to absolute rest. The departure date was getting near, and the inhabitants of Fort Providence did not await it without some emotion. It rather distressed them to leave the snow-house which had formed their home, Victoria Bay, and this hospitable coast where they had spent the latter part of the winter. Would they still find the buildings when they returned? Would not the sunshine end by melting their fragile walls?

On the whole they had been so happy there! At their evening meal the doctor reminded his companions of this, nor did he forget to thank Heaven for its visible protection.

At last came the hour for sleep; they turned in early so as to get up in good time. Thus passed the last night at Fort Providence.

CHAPTER XIX

THE JOURNEY NORTH

NEXT day, at dawn, Hatteras gave the signal to start. The dogs were harnessed to the sledge, after being well fed, well rested and comfortably lodged during the winter, they could hardly protest at having to give good service during the summer. Splendid creatures, after all, these Greenland dogs; their savage nature had gradually been transformed: they had lost all resemblance to the wolves and had become more like Duk, that accomplished model of the canine race—in short, they were getting civilized.

Duk could certainly claim a share in their education; he had given them lessons in comradeship by example. Like an Englishman, very suspicious of anything bordering on "cant", Duk did not fraternize at once, especially with dogs who hadn't been introduced, and on principle he had never spoken to them, but by dint of sharing the same dangers, the same privations, and the same fortune, these animals of different race had soon got on terms of brotherhood. Duk, a good natured dog, had made the first advances, and soon all the four footed tribe became a band of friends. When the doctor caressed the Greenlanders Duk showed no jealousy.

The men were in as good condition as the dogs; if the latter were willing to pull, the others were ready to step it out.

They set out in fine weather at six in the morning; after they had rounded the bay and passed Cape Washington, Hatteras gave the route as due north. By seven they had lost sight of the lighthouse cone and Fort Providence.

The journey promised well and above all better than the mid-winter expedition in search of coal. Then Hatteras had left behind him revolt and despair, and he had not even been certain of finding what he went to seek; he

had left a crew half dead with cold, and set out with companions enfeebled by the sufferings of an Arctic winter; when all his hopes lay north, he had been going south! Now, on the contrary, accompanied by healthy and vigorous friends, sustained, encouraged, and urged onwards, he was making for the Pole, the goal of all his life! No man had ever been so near acquiring that glory for his country and himself.

Were these thoughts naturally inspired by circumstances? The doctor liked to think so, and could scarcely doubt it at seeing him so ardent. The good Clawbonny rejoiced with what delighted his friend, and since the reconciliation of the two captains, of his two friends, he regarded himself as the happiest of men.

What would happen during the journey, or what its result would be, he did not know, but it had begun well. That was something. The northern coast-line of New America extended beyond Cape Washington as a series of bays; so, to avoid too wide a circuit, the travellers, after crossing the first slopes of Bell Mount, went northwards over the higher tablelands. This made a great saving of distance; Hatteras wished, unless unforeseen obstacles of straits or mountains should oppose him, to go in a direct line across the 350 miles from Fort Providence to the Pole.

The journey was easy; the lofty plains were carpeted with hard snow, over which the sledge glided easily on its sulphur greased runners; and, shod in their snow-shoes, the men could move surely and quickly.

The thermometer marked 37° . The weather was not quite settled; it was now misty, now clear, but neither cold nor storms would have stopped travellers so determined to push on.

The compass showed the road clearly; the needle moved less sluggishly as it got farther from the magnetic pole. Admittedly, once that point was passed, it turned back towards it and pointed south, so to speak, to indicate the north; but this inverse indication did not make calculations difficult.

What was more, the doctor invented a simple system of landmarks that kept them from having to use the compass overmuch. Once their position was fixed in clear weather, the travellers looked for some object exactly to their north about two or three miles ahead. They marched towards it until they reached it; then they chose another point in the same direction, and so on. Thus they never wandered far out of the straight path.

During the first two days of the journey they went about twenty miles in twelve hours; the rest of the time was consecrated to rest. At night the tent gave them adequate shelter.

The temperature showed a tendency to rise; in places the snow melted completely, following the inequalities of the ground, while other parts kept their immaculate whiteness. Broad stretches of water here and there formed ponds which with a little imagination could have been taken for lakes. The travellers sometimes went in half-way up their legs; this merely amused them and the doctor was pleased with these unexpected baths.

"Water hasn't got my permission to wet us in this country," he said; "here it ought only to exist in a solid state or as a gas, but to keep liquid is taking a liberty. Ice or vapour, that's all very well, but water, no!"

They did not forget to hunt during their journey, as they had to get fresh food. Altamont and Bell, without going very far, beat the neighbouring ravines, where they shot ptarmigans, geese, and a few grey hares. These creatures passed little by little from confidence to fear, and became very difficult to approach. Without Duk the hunters would not have got much for their powder and shot.

Hatteras advised them not to go more than a mile away, for he had not a day or even an hour to lose, as they could not count upon more than three months of fine weather. Moreover, they were all needed at the sledge when the path grew difficult, when narrow defiles or sloping plateaux had to be crossed. Then they all harnessed themselves or held on to it, hauling, shoving, or steadying it. More than once they had to unload it entirely; but even

that did not prevent collisions and damage, which Bell repaired as best he could.

On the third day they encountered a lake several acres in extent, and still completely frozen because it was sheltered from the sun; the ice was even strong enough to bear the weight of travellers and sledge. This ice seemed to date from a long-distant winter, for because of its situation the lake could never thaw. It formed a compact mass over which the Arctic summers had no control; its age was confirmed by the covering of dry snow on its banks, the lowermost layers clearly dating from earlier years.

From then on the ground visibly sloped downwards, whence the doctor concluded that it could not extend far north; it now seemed very likely that New America was only an island, and did not extend to the Pole. The soil gradually got more level, though a few low hills appeared to westward, looking even lower because of their distance, and bathed in a bluish mist.

So far the journey had been made without much fatigue; the travellers had suffered only from the reflection of the sun's rays on the snow, so intense that it might well have produced snow-blindness. At any other season they would have travelled by night to avoid this inconvenience, but now there was no longer any night. Fortunately the snow had a tendency to melt, losing much of its brilliance as it became water.

On 28th June the temperature rose to 45° above zero; this rise of the thermometer was accompanied by abundant rain. The travellers received it stoically, even with pleasure, for it would hasten the disappearance of the snow; they had to put on their buckskin moccasins and to fix a different type of runner on the sledge. This necessarily delayed them, but in the absence of any serious obstacle they still made progress. Sometimes the doctor picked up round or flattened stones, like wave-worn shingle, and then he fancied he was near to the Polar basin, though the plain stretched on out of sight.

The land offered no trace of any habitation, neither huts, nor cairns, nor Esquimau *caches*; the travellers were

obviously the first to tread this new country; the Greenlanders who inhabit the Arctic lands never get so far, and yet here the poor wretches, always half famished, would have found plenty of food. Bears could sometimes be seen following the little troop to leeward, without showing any intention of attacking it; in the distance appeared herds of musk-ox and reindeer. The doctor would have liked to catch some of the latter to help the dogs, but they were very shy, and impossible to take alive.

On the 29th Bell killed a fox, and Altamont, after giving his companions an idea of his skill and sang-froid, was lucky enough to bring down a fair-sized musk-ox of average size; he was a marvellous hunter, and the doctor, who realized this, greatly admired him. The ox was cut up, and supplied plenty of fresh food. These chance meals were always welcomed; even those who cared least about good eating could not keep from throwing glances of satisfaction at the slices of fresh meat. The doctor laughed at himself when he caught himself in ecstasy before the succulent morsels.

"We need not be ashamed of it," he said; "eating looms large in Polar exploration."

"Especially," added Johnson, "when it depends on a lucky or unlucky shot."

"You're right, Johnson," replied the doctor, "we don't think so much about eating when the pot boils regularly on the stove."

On the 30th the country, against all expectation, grew very hilly, as though lifted by some volcanic commotion. Cones and sharp ridges rose to a great height in every direction.

A south-westerly breeze began to blow with violence, and it soon became a tempest; it roared across the snow-crowned rocks and the mountains of ice, which on the land took the form of hummocks and icebergs: their presence on these elevated plateaux remained inexplicable even to the doctor, who could explain most things. After the tempest came warm damp weather; it was quite a thaw; on every side could be heard the breaking up of the ice, mixing with the impressive roar of the avalanches.

The travellers took care to keep clear of the bottoms of the hills, and even avoided speaking loudly, for the sound of their voices, by disturbing the air, might bring about a catastrophe. They often witnessed terrible falls of ice which they had not time to foresee.

The chief characteristic of a Polar avalanche is its unexpectedness; in this it differs greatly from those of Norway and Switzerland, where a mass of snow, though small at first, gets larger by picking up more of the snow and rock as it falls with increasing rapidity, devastating the forests and burying the villages, but taking some time to descend.

Not so in the cold of the Arctic; here a block of ice collapses instantaneously without warning and with overwhelming force; its fall follows upon its first movement, and anyone who sees it swaying above him is inevitably crushed; a cannon ball moves no more quickly nor is lightning more sudden. To loosen, to fall, to destroy, are all one for the Arctic avalanche, accompanied by the roar of thunder and followed by echoes more plaintive than loud.

Sometimes, under the very eyes of the astonished spectators, the whole landscape is transformed; a rapid thaw converts a mountain into a plain; when the water in the rock-fissures freezes in the cold of a single night, its irresistible expansion bursts all obstacles; it is even more powerful when it becomes ice than when it becomes steam, and the change is accomplished with appalling speed.

No accident, fortunately, befell the sledge and its crew, whose careful precautions averted any danger. Moreover, this country, bristling with crests and ramparts, ridges and icebergs, did not extend far; and three days later, on 3rd July, the travellers found themselves on easier plains. There they were astonished by another phenomenon which has long drawn the patient investigations of the scientists of two worlds. The little troop was skirting a range of hills, fifty feet high at most and seeming to extend for several miles: its eastern slopes were covered with snow, but that snow was completely red.

Their surprise, and even their dismay, at the sight of this long crimson curtain may well be imagined. The doctor

made haste to reassure and instruct his companions; he had heard of the red snow, of the results of its chemical analysis, and he told them that it is to be met with not only in the Arctic countries but also in Switzerland amid the Alps; De Saussure had collected a quantity of it in 1760; and since then a number of explorers have brought specimens of it back from the far north.

Altamont asked the doctor about this extraordinary substance, and learned that the colour was entirely due to the presence of organic particles; chemists had long been seeking to know if they were of animal or vegetable origin, and had at last discovered that they belong to the family of microscopical fungi, of the species *Uredo*, and that Bauer proposed calling them "*Uredo nivalis*".

Then the doctor, poking his stick into the snow, showed that the layer was nine feet deep, and asked them to calculate how many of these fungi there were in an area of several miles, when the savants had counted as many as 43,000 in a square centimetre.

The formation of the slope suggested that the colouring must date from a far-distant period, for the fungi do not decompose, nor does their colour change when the snow evaporates or melts. The phenomenon, though it had been explained, was none the less strange, for the colour red is seldom met with over large areas in nature. The reflection of the sun's rays on this royal carpet produced strange effects, giving the surrounding objects, the rocks, men, and animals, a flaming appearance, as though they were lighted up by an inward fire; when the snow melted it seemed as if torrents of blood were flowing down to the travellers' very feet.

The doctor, who had not been able to examine this substance when he saw it on the Crimson Cliffs of Baffin Bay, could easily do so here, and he carefully collected several bottles of it. This red soil, the "Field of Blood", as he called it, was not passed for three hours; then the country resumed its normal aspect.

CHAPTER XX

FOOTPRINTS IN THE SNOW

ON 4th July a thick fog lasted all day. The northward direction was difficult to follow, and at every moment it had to be rectified by the compass. Happily no accident happened in the obscurity except that Bell lost his snow shoes, which he smashed against a projecting rock.

"I thought," said Johnson, "that after visiting the Mersey and the Thames we knew something about fogs, but I see my mistake"

"Well," replied Bell, "we ought to light flares as they do in Liverpool or London."

"Why not?" agreed the doctor; "that's a good idea; they wouldn't light the way much, but they'd enable us to see the guide"

"But how are we to make the flares?" asked Bell.

"With some tow dipped in spirits of wine and fastened on the end of our staves"

"A good idea," said Johnson, "and they won't take long to fix up."

A quarter of an hour later the little troop was again plodding on, lighted by their flares, in the midst of the damp mists. But if they went on straighter, they went no faster, and the dark vapour lasted until 6th July, when the ground suddenly became colder, and the north wind swept away the fog.

Having taken his bearings, the doctor found that they had covered only eight miles a day during the fog, so on the 6th they pushed on to make up for the lost time, starting very early. Altamont and Bell, accompanied by Duk, went on ahead to explore the ground and keep a look-out for game. With its usual astonishing rapidity, the weather had grown clear and very dry, and though the

guides were two miles in front of the sledge, the doctor did not lose sight of their movements.

So he was very surprised at seeing them stop all at once, and stand motionless as though bewildered; they seemed to be staring around them and sweeping the horizon with their gaze. Then, bending towards the ground, they examined it carefully and rose, seemingly more surprised. Bell appeared to be anxious to go on, but Altamont restrained him with his hand.

"What's up with them?" the doctor asked Johnson.

"I've been watching them, too, Dr. Clawbonny, and I can't make it out."

"They must have found some animal tracks," suggested Hatteras.

"That can't be," answered the doctor.

"Why not?"

"Because Duk would have barked."

"Those are footprints they're looking at, anyway."

"Let's get on," urged Hatteras; "we'll soon know what it is."

Johnson roused the dogs, who ran on more quickly. In about twenty minutes the five travellers were reunited, and Hatteras, the doctor, and Johnson shared the surprise of Altamont and Bell. Human footprints were there on the snow, clear, unmistakable, and as fresh as if they'd been made the day before.

"They're Esquimaux'," said Hatteras.

"They must be," replied the doctor; "here's the prints of their snow-shoes."

"What about this footprint, then?" asked Altamont, showing one which appeared several times.

"This footprint?"

"Does that belong to an Esquimaux?"

The doctor looked carefully and was filled with amazement. The print of a European shoe, with its nails and sole and heel, was deeply impressed in the snow; there could be no doubt about it. Some man, some stranger, had passed that way.

"Europeans here!" exclaimed Hatteras.

"That's clear," said Johnson.

"But," the doctor protested, "that's so unlikely that we must look twice before we make certain."

The doctor did look twice, three times, at the markings, and he had to agree that their origin was out of the ordinary. The hero of Daniel Defoe could not have been more stupefied when he saw the footprint in the sand of his island; but whereas he had felt afraid, Hatteras was simply annoyed. A European so near the Pole!

They went on to make certain of the tracks; these continued for about a quarter of a mile, then they swerved towards the west. When they reached that point the explorers wondered if they ought to follow them any further.

"No," said Hatteras. "Let's get on——"

He was interrupted by an exclamation from the doctor, who had just picked up something more convincing still and whose origin was not for a moment in doubt. It was the lens of a pocket telescope.

"This time there's no mistake about it!" he said.

"Forward!" cried Hatteras.

He spoke with such determination that they all followed him, and the sledge resumed its interrupted journey. Each of them watched the horizon carefully, except Hatteras, who was enraged and unwilling to see anything. Still, as there was a risk of falling in with a group of travellers, they had to be cautious; it was real bad luck to have been forestalled on that route into the unknown. The doctor, though he did not share Hatteras's anger, in spite of his habitual philosophic outlook, could not help feeling annoyed. Altamont appeared equally vexed, and Johnson and Bell growled menacing words between their teeth.

"Come," said the doctor, "let's keep our hearts up."

"I must say," replied Johnson, though without being heard by Altamont, "that it isn't worth going to the Pole only to find that somebody else has got there already."

"Yet," said Bell, "there's no reason to doubt——"

"No," replied the doctor, "it's all very well for me to turn it over in my mind and tell myself that it's improbable,

impossible, but I've got to give way; that shoe didn't imprint itself in the snow without being on the end of a leg, and a leg attached to a human body. An Esquimau I shouldn't have minded, but a European!"

"The fact is," replied Johnson, "that if we find all the beds taken at the inn at the end of the world it will be annoying."

"Very annoying," agreed Altamont.

"Well, we shall see," said the doctor.

And they plodded on.

That day passed without any new fact to confirm the presence of strangers on that part of New America, and at last they chose a site for the night's camp.

As a violent north wind had sprung up they had to find a shelter for the tent at the bottom of a ravine. The sky was threatening and long clouds fled along, seeming to skim over the earth so rapidly that the eye could scarcely follow them in their wild career. Sometimes wisps of vapour touched the ground, and the tent withstood the gale only with difficulty.

"There's a nasty night coming down," said Johnson after supper

"It won't be cold but it'll be rough," agreed the doctor. "We must fasten the tent down with some large stones"

"You're quite right, Dr. Clawbonny, for if the wind carries it off, who knows when we'll get it back?"

The most careful precautions were accordingly taken to ward off the danger, and the wearied travellers tried to get to sleep. But it was impossible; the unchained tempest swept from south to north with incomparable violence; the clouds were hurled into space like steam from a newly exploded boiler. Beneath the blows of the storm the last of the avalanches were cast into the ravine, which echoed with the sound of their fall; the atmosphere seemed to be the theatre of a life-and-death combat between air and water, two elements formidable in their wrath; fire alone was missing from the battle.

The over-excited ear could distinguish individual noises

in the general roar: not the tumult that accompanies the fall of heavy bodies, but a sharp snapping sound like steel breaking, as well as the roaring of the tempest.

Some of the noises could be explained naturally by the fall of the avalanches, but the doctor did not know what the others were due to. Profiting by the moments of anxious silence, when the wind seems to be holding its breath only to blow with greater violence, the travellers discussed them.

"That," remarked the doctor, "sounds as though the icebergs and ice-fields were bumping against one another."

"Yes," answered Altamont, "it seems as if the whole of the earth's crust were being dislocated. Just listen."

"If we were near the sea," said the doctor, "I should think it was the ice breaking up."

"That's the only thing that explains the noise," replied Johnson.

"Perhaps we've reached the coast," suggested Hatteras.

"That's not at all impossible," agreed the doctor. "Listen," he added after an extremely violent cracking noise; "doesn't that sound like ice-blocks being crushed? We must be quite near the ocean."

"If we are," said Hatteras, "I shan't hesitate to set out across the ice."

"Oh," replied the doctor, "it can't help being broken up after such a tempest. But we'll see tomorrow; if there are any travellers out on a night like this, I pity them with all my heart."

The tempest raged without a break for ten hours, and none of the men could get a moment's sleep. The night passed in deep anxiety for, in such circumstances, any unforeseen incident, a tempest, an avalanche, might produce a serious delay. The doctor would have liked to go out to see what was happening, but who could do so in such a wind?

Fortunately, during the early hours of the morning, the tempest calmed down; they were able to leave the tent, which had stood up so valiantly. The doctor, Hatteras, and Johnson went off to a hill about three hundred feet high, and climbed it fairly easily.

Their eyes then beheld a country completely transformed, consisting of bare rocks sharply pointed, and completely free from ice. It was summer suddenly following winter, chased away by a tempest; the snow, shaved by the cutting wind as though by a razor, had not yet had time to melt, and the soil appeared in all its primitive nakedness.

But Hatteras looked only towards the north, where the horizon was bathed in blackish vapour.

"That seems to be caused by the ocean," said the doctor.

"Quite right," answered Hatteras. "The sea must be over there."

"That colour is what we call the 'blink' of the open sea," explained Johnson.

"Precisely," agreed the doctor.

"Back to the sledge ready, they struck camp. They set out again, each of them fearing to find the footprints like those seen the day before, but for the rest of the journey no trace of any strangers, native or otherwise, could be seen. Three hours later they reached the coast.

"That'll delight your heart," Clawbonny remarked to the captain.

"Yes, it will," the latter replied enthusiastically; "before long we shall reach the Pole. Tell me, doctor, doesn't that please you, too?"

"Me? I'm always pleased, especially when my friends are."

The three Englishmen went back to the ravine, and, having got the sledge ready, they struck camp. They set out again, each of them fearing to find the footprints like those seen the day before, but for the rest of the journey no trace of any strangers, native or otherwise, could be seen. Three hours later they reached the coast.

"The sea! The sea!" they shouted.

"And the open sea!" exclaimed the captain.

It was ten in the morning.

The tempest had opened the Polar basin; the ice, broken up and scattered, was drifting in all directions; the largest blocks, becoming icebergs, had "weighed anchor", as the sailors say, and were sailing about in the open sea. The ice-field had been harshly attacked by the wind; a hail of fine blades and splinters and dust of ice lay on the surrounding rocks. The scanty remains of the ice-field at shore

level looked as if they were mildewed, for they were covered with discoloured seaweed.

The ocean stretched out of sight; no island, no other new land, broke the horizon. To east and west the coast formed two capes, which sloped gradually down to the sea; the waves broke over them; and the wind carried a light foam from their white crests. The soil of New America ended below the Polar Ocean, without any disturbance, quietly dipping down into the water; it was rounded to form an open bay, bounded by the two promontories. In the centre a projecting rock made a small natural harbour, sheltered on three points of the compass; it penetrated deep into the land along the wide bed of a brook, which the melted snow had turned into a torrent.

After Hatteras had surveyed the coast he decided to launch the boat at once, taking the sledge to pieces and embarking it for future use. This would take the rest of the day, so they erected the tent, and after a refreshing meal they set to work; meanwhile the doctor took his instruments to get their bearings and to investigate the hydrography of part of the bay. Hatteras hurried the work on, for he was anxious to start, he wanted to leave terra firma and to push ahead in case some other party should reach the sea.

At five in the evening Johnson and Bell could fold their arms. The boat swung gracefully in the little harbour, its mast stepped, its jib and mainsail furled; the food and the component parts of the sledge had been taken on board. Nothing remained but the tent and some equipment to be loaded next day.

When the doctor returned, he found all was ready. As he saw the boat quietly sheltered from the wind, it suddenly occurred to him to name this little port after their American comrade. There was no difficulty about this and everyone agreed that it should be called Altamont Harbour. According to the doctor's calculations it was situated at $87^{\circ} 05' N.$, $118^{\circ} 35' W.$ of Greenwich—less than 3° from the Pole. The travellers had covered a distance of 200 miles from Victoria Bay to Port Altamont.

CHAPTER XXI

THE OPEN SEA

NEXT morning Johnson and Bell loaded the camp equipment and by eight were ready to set off. Now that they were leaving the coast the doctor began to think of the travellers whose footprints they had seen. He asked himself if they too were bound for the Pole, whether they had any means of crossing the sea, and whether he and his companions should meet them on the way.

Nothing had revealed their presence for three days, and certainly, whoever they might be, they had not reached Altamont Harbour. It was untouched by any human foot.

Yet, urged on by his thoughts, the doctor wanted to survey the country yet once more, so he climbed a cliff over a hundred feet high, whence his eye could sweep the whole southern horizon.

Arrived at its summit, he put his pocket telescope up to his eye. What was his surprise to see nothing with it—not even the objects near him! That seemed to him very strange; he looked round again, and at last he glanced at the telescope itself and examined it.

"The objective lens," he exclaimed.

The sudden revelation which burst on his mind may well be understood; he shouted so loudly that his companions heard him, and great was their anxiety at seeing him run down the hill as fast as his legs could carry him.

"Hullo, what's up now?" asked Johnson.

The doctor, out of breath, could not pronounce a word. At last he managed to say, "The trail . . . the footsteps . . . that other party . . ."

"Well, what about it?" demanded Hatteras. "Strangers here?"

"No, no!" replied the doctor, "the lens—my lens—it was mine!"

And he showed his incomplete telescope.

"Ah!" cried the American. "So you lost——"

"Yes!"

"But what about those footprints?"

"Our own, my friends, our own," exclaimed the doctor.

"We got lost in the fog! We went round in a circle, and got back on our own trail!"

"But the print of those shoes?" asked Hatteras.

"They were Bell's shoes. After he smashed his snow-shoes he had to walk all day in the snow?"

"That's quite true," said Bell.

And the error was so plain that they all burst out laughing, except Hatteras, who, however, was not the least happy at this revelation.

"How stupid we were!" the doctor said when their mirth had calmed down. "What fine guessers we made! Strangers here indeed! Certainly we ought to think before we speak. Well, now our minds are at rest on that point we've only to start."

"Go ahead!" Hatteras gave the order.

A quarter of an hour later they were all in the boat which, under mainsail and jib, soon left Altamont Harbour. The ocean journey began on Wednesday, 10th July; the navigators were then very near the Pole, just 175 miles away; if any land were situated at that point the sea voyage must be very short.

There was not much wind, but it was favourable. The thermometer was at 50° above zero, and the weather quite warm. The boat had not suffered from its sledge journey; it was in good condition, and easy to manœuvre. Johnson steered; the doctor, Bell, and the American seated themselves as best they could among the luggage, stowed partly on deck and partly beneath it. Hatteras, in the bow, fixed his eyes on that mysterious point towards which he felt himself drawn, as the compass needle is drawn to the magnetic pole. Whatever shore might appear, he wanted to be the first to see it. That honour belonged to him.

He noticed that the surface of the Polar Ocean was covered with short waves, like those which form on seas

small in extent. He saw in this an indication that land was near, and the doctor shared his opinion.

It is easy to understand why Hatteras so much wished to find land at the North Pole. What disappointment he would have felt to behold a sea, uncertain and elusive, stretching where a piece of land, however small, was necessary to his plans. How, indeed, could he give a name to an indeterminate tract of the ocean? How could he plant his country's flag upon the waves? How take possession in Her Gracious Majesty's name of part of the liquid element?

So, with intent gaze, Hatteras, compass in hand, stared towards the north.

Nothing so far broke the Polar Basin as far as the horizon, which mingled in the distance with the clear sky of these latitudes. Some icebergs floating in the offing seemed to open out to form a gap through which the bold navigators could pass.

This region had a very strange aspect, but might not this impression be due to the nervous condition of the travellers? It would be hard to say. Yet the doctor entered in his log-book a description of the bizarre look of that sea; it corresponds with that of Penny, who said that it "seemed animated by millions of living creatures".

The liquid plain, coloured by vague tints of other-worldly appearance, was strangely transparent and had an incredible refractive power. The eye could penetrate it to untold depths; the Polar Basin seemed to be lighted from below like an immense aquarium; no doubt some electrical action, produced near the sea-floor, lit up its deepest layers. The boat seemed suspended over a bottomless abyss.

Over these strange waters innumerable flocks of birds flew like dense thunder-clouds. Birds of passage, shore-birds, sea-birds, all were there, from the albatross, so common in the southern climes, to the penguin of the Arctic seas, though here they were of gigantic size. Their cries formed a continual deafening uproar; though the doctor was a good naturalist, he could not remember the names of them all, and he was surprised to find himself crouching

down when their wings beat the air with indescribable power. Some of these aerial monsters had a wing-spread of twenty feet; in their flight they completely overshadowed the boat, and there were among them legions of birds whose names have never appeared in the *Index Ornithologus* of London.

The doctor was deafened and at the same time disconcerted to find his science at fault. Then, when leaving the marvels of the sky he turned his gaze to the surface of the sea, it encountered animals no less astonishing. Among others were jellyfish, some thirty feet across; they served as food for the aerial population, and floated like veritable islands in the midst of the gigantic seaweeds. How amazingly different from these were the microscopical jellyfish observed by Scoresby in the Greenland seas, which he estimated at 23,898,000,000,000,000¹ in an area of two square miles!

When, below the surface, the depths of the transparent water were inspected, the spectacle was no less supernatural. They were furrowed by thousands of fish of every species, sometimes these plunged rapidly into the depth of the liquid, where they were seen disappearing, growing smaller and smaller like phantasmagoria; sometimes, quitting the depths of the ocean, they rose, gradually increasing in size, to the surface. The marine monsters did not seem afraid at the boat's presence; they brushed it as it passed with their enormous fins; where professional whalers would have been rightly terrified, the travellers did not even suspect their danger, though some of the sea's inhabitants were of formidable proportions.

The young sea-calves played together; the narwhal, as fantastic as the unicorn, armed with its long, straight, conical arm, a marvellous tool for sawing the ice fields, hunting the more timid cetaceans; innumerable whales spouting columns of water and mucus and filling the air with a characteristic whistle; the north-caper, with its

¹ As this number cannot be imagined, the English whaler, to make it more comprehensible, says that it would have taken 80,000 people to count them if they had started at the Creation—J.V.

flexible tail and large fins, cleaving the waves with immeasurable speed, feeding meanwhile on animals as rapid as itself, while the lazier white whale was gulping down molluscs no less indolent.

Farther below were other types of whales, including giant cachalots, a species known in every sea, swimming amid streams of ambergris or waging Homeric battles that reddened the surface of the ocean for several miles; the dolphins with spines as sharp as sabres; the whole family of seals including those called "sea-dogs", "sea-horses", "sea-bears", and "sea elephants", seemed to be browsing in their ocean meadow, and the doctor admired these countless animals as easily as he could the fish in the *Aquaria* of the Zoological Gardens.

What beauty, what vanity, what strength in nature! How magically strange in the heart of the regions around the Poles!

In these regions the air was supernaturally clear and apparently supercharged with oxygen; the travellers delightedly breathed it in, and it seemed to enrich their life. Without realizing it they found their mental and physical processes speeded up; they seemed endowed with super-human energy; the ideas developed in their over-excited brains became grandiose; in an hour they seemed to live a whole day.

In the midst of these marvels, the boat glided peacefully on, driven by a moderate wind, which the giant albatross fanned into activity with their great wings.

Towards evening Hatteras and his companions lost sight of the coast of New America. Night had fallen for the temperate and equinoctial zones; but here the sun, enlarging its spiral, traced a course parallel with the surface of the ocean. The boat, bathed in its oblique rays, could not leave the luminous centre which travelled along with her.

The living creatures of the hyperborean regions seemed, however, to sense the approach of evening as though the radiant star had sunk below the horizon. Birds, fish, and cetaceans disappeared. Where? Into the heights of the

sky? Into the depths of the sea? Who could say? But on their cries and roarings and the movement of the waves agitated by the breathing of the marine monsters there soon followed a profound silence; the waves slept in an imperceptible undulation, and night exercised its peaceful influence beneath the glittering rays of the sun.

Since she had left Altamont Harbour the boat had gone one degree north; the next day no signs of New America appeared on the horizon, neither the high peaks which announce distant land nor those special signs by which sailors know its proximity.

The wind continued fair without being strong, and there was very little swell; the escort of birds and fishes returned as numerous as on the day before. The doctor, as he bent over the waves, could see the cetaceans leave their deep retreats and rise gradually to the surface: a few icebergs, and here and there some scattered flocs, alone broke the endless monotony of the ocean.

But on the whole, ice was rare, and it would not have hindered the movement of a ship. It must be remembered that the boat was then ten degrees above the Pole of Greatest Cold, and this came to much the same as being ten degrees below. It was not surprising, therefore, that the sea should be free at that period as it must have been when they passed Disko, in Baffin Bay.

This fact has great practical importance. If ever whalers can go so far north, either by the seas north of America or by those north of Asia, they are sure to get a cargo quickly, for that part of the ocean seems to be the general breeding ground of whales, seals, and all other marine animals.

Even at noon nothing was to be seen on the horizon; the doctor began to doubt the existence of any land so far north. But on reflection he felt bound to believe in the existence of a boreal continent; in the first days of the world, after the cooling of the earth's crust, the waters, formed by the condensation of atmospheric vapours must have been subject to centrifugal force, and have rushed towards the equatorial zones, forsaking the motionless ends

of the earth. Hence the necessary appearance of land in the vicinity of the Pole. Both the doctor and Hatteras found this reasoning good.

The captain tried to pierce the mists on the horizon. his telescope never left his eyes. He sought in the colour of the water, in the shape of the waves, in the souging of the wind, the first signs of approaching land. His gaze was resolutely turned to the north, and even those who could not read his thoughts would none the less have admired his attitude, his energetic will and his anxious enquiry.

CHAPTER XXII

THE APPROACH TO THE POLE

THE time flowed on in this uncertainty. Nothing showed itself in that clearly marked circle, nothing but water and sky. Nothing floated on the waves, not even a vestige of those land plants which gladdened the heart of Christopher Columbus as he went forward to the discovery of America. Hatteras still looked ahead.

At last, towards six in the evening, a mist, vaguely shaped but certainly at a great height, appeared above the sea.

The sky was quite clear, so that the mist could not be a cloud; it momentarily vanished and reappeared, as though in motion

Hatteras was the first to notice it; he kept his telescope fixed upon it, and watched it carefully for an hour. Then suddenly something he had noticed made him stretch his arm towards the horizon and shout: "Land! Land!"

These words made them jump up as though they had received an electric shock. Some land or smoke was plainly rising above the sea

"I can see it! I can see it!" exclaimed the doctor

"Yes, indeed—yes," agreed Johnson.

"It's a cloud," declared Altamont

"Land! Land!" Hatteras repeated, with unshakeable conviction.

The five explorers studied it attentively. But, as so often happens with objects rendered indistinct by distance, the thing they had noticed seemed to have vanished. At last they saw it again, and the doctor even thought he could see a flickering light, twenty or twenty-five miles north.

"It's a volcano!" he exclaimed.

"A volcano?" repeated Altamont.

"No mistake about it."

"At so high a latitude?"

"Why not?" replied the doctor. "Isn't Iceland, so to speak, made of volcanoes?"

"Yes, Iceland is," the American agreed; "but so near the Pole?"

"Well, my illustrious compatriot Commodore James Ross found two volcanoes on the Antarctic continent, which he called the Erebus and the Terror, both in full activity, and they were seventy eight degrees south! So why shouldn't volcanoes exist at the North Pole?"

"It's possible, certainly," answered Altamont

"Ah!" exclaimed the doctor, "I can see it plainly; it is a volcano!"

"Well," Hatteras decided, "we'll make straight for it."

"The wind's changing!" shouted Johnson.

Hatteras gave orders accordingly, with the result that the sloop swerved away from the point they had noticed, and they could not find it again.

Yet the proximity of the coast could no longer be doubted. In twenty four hours their goal would be reached, and they would set foot on soil on which no human foot had ever trod. Providence, which had let them get so close to it, would surely not wish to keep them from reaching it.

But none of them showed the joy which such a discovery might be expected to arouse; each silently wondered what sort of a country it could be so near the Pole. Animals seemed to be avoiding it. In the evening, the birds, instead of seeking a refuge upon it, fled towards the south. Could it be so inhospitable that not a seagull or a ptarmigan could find a home upon it? The very fish, the great whales, were speeding rapidly away from the coast through the transparent water. Whence came this feeling of repulsion, if not of terror, that seemed common to all the living creatures haunting this part of the world?

Each of the travellers felt the same impression, and they abandoned themselves to it until sleep made their eyelids heavy. Hatteras was on watch. He took the helm; the doctor, Altamont, Johnson, and Bell, stretched out on the seats, fell asleep one after another, and were soon plunged into dreamland. •

Hatteras wanted to keep awake; he did not want to lose any of this precious time; but the slow rocking of the boat gradually lulled him into drowsiness, and in spite of himself he fell into a deep sleep. The boat hardly moved, as there was scarcely enough wind to fill the sail. In the distance a few icebergs reflected the rays of the sun and formed luminous patches in the midst of the ocean.

Hatteras began to dream. His thoughts wandered rapidly over the whole of his career; he ascended the river of his life with the speed peculiar to dreams, which nobody has yet been able to calculate; once again he saw his wintering, Victoria Bay, Fort Providence, Doctor's House, the American beneath the ice. Then he went farther back into the past; he dreamed of his ship, of the burnt *Forward*, of his companions, the traitors who had forsaken him. What had become of them? He thought of Shandon, Wall, and the brutal Pen. Where were they? Had they been able to reach Baffin Bay across the ice?

Then his imagination went farther back still, and he re-lived his departure from England, his earlier voyages, his fruitless endeavours, his evil luck. He forgot his present position, his approaching success, and his half-realized hopes. From his joy his dream cast him back into sorrow. This continued for two hours; then his thoughts assumed another aspect: they took him to the Pole. He saw himself setting foot on an English country, and unfurling the flag of the United Kingdom.

While Hatteras slept on, an enormous olive-coloured cloud rose from the horizon and darkened the sea.

It is hard to imagine the appalling speed with which storms attack the Arctic seas. The vapours formed near the equator come northwards, to be condensed above the immense glaciers and draw volumes of air to take their place with irresistible violence. This process explains the violence of the boreal storms.

At the first gusts of wind the captain and his companions threw off slumber and were ready for action. The sea rose as high waves on narrow bases; the boat, tossed about by

a violent swell, plunged into a deep abyss, or swung on a wave-crest sloping at forty-five degrees.

Hatteras had gripped the helm, which quivered in its socket; sometimes it was thrust against him so violently that it made him recoil. While Johnson and Bell were busy baling out water from the boat.

"We didn't reckon on a storm like this," said Altamont, holding on to his seat.

"We must be ready for anything here," answered the doctor.

These remarks were exchanged through the scream of the air and the roar of the waves, reduced by the violence of the wind to an impalpable liquid dust. The men could hardly hear one another, and it was difficult for them to steer north; the thick mist kept them from seeing more than a few yards ahead; every landmark had disappeared.

To their excited minds this sudden tempest seemed like a solemn warning to go no farther, as though Nature had forbidden access to the Pole. Could it be defended by storms and hurricanes which prevented it from being approached?

But the energy shown in their faces made it clear that they would yield neither to wind nor waves, but would go on to the end. Thus they battled on all day, risking their lives at every moment, going no nearer to the north, but not losing the distance they had gained. They were drenched by a warm rain and by the sea water which the wind drove in their faces; the sinister cries of the birds mingled with the screaming of the gale.

But towards six in the evening, just when the wrath of the waves was at its height, the travellers felt a sudden calm. The wind fell miraculously quiet. The sea became as peaceful as though a swell had not been raising it for the last twelve hours. The tempest seemed to have respected that part of the ocean.

What had happened? An extraordinary, inexplicable phenomenon like that which Captain Sabine had witnessed during his travels in the Greenland seas.

The fog had not cleared away but had become strangely

luminous. The boat was sailing in a zone of electric light, an immense St. Elmo's fire, brilliant but devoid of heat. Mast, sails, and rigging were clearly outlined in black against a background of luminous air; the crew were plunged into a bath of transparent rays, and their faces gleamed in its reflection. The sudden calm in that part of the ocean was no doubt caused by the upward movement of the columns of air, while the tempest, like a cyclone, revolved round this peaceful centre.

But the fiery air inspired Hatteras with an idea. "The volcano!" he exclaimed.

"Is that possible?" asked Bell.

"No, no," the doctor replied. "We should be stifled if its flames were reaching us!"

"It may be its reflection on the fog," suggested Altamont.

"No, it can't be that either, for then we should be near land, and we'd hear the sound of the eruption."

"What can it be, then?" asked the captain.

"It is a cosmic phenomenon," explained the doctor, "and a very rare one. If we keep on our way we shan't be long in getting out of this luminous sphere back into the darkness of the storm."

"Whatever we get into we'll keep on," Hatteras decided.

"Yes," agreed his companions, who had no idea of stopping in this calm even to get their breath.

The sail dropped from the gleaming mast in fiery folds; dipping into the glittering waves, the oars seemed to raise a spray of sparks consisting of drops of luminous water. As Hatteras, compass in hand, steered towards the north the fog gradually became less luminous and transparent. The wind could be heard roaring a few cables' length away and soon the boat, driven by a violent gale, re-entered the zone of the tempest. But fortunately the gale had veered south, and the boat could now run before the wind, making for the Pole, running the risk of foundering, but rushing along with a crazy speed; if a reef, a rock or an ice-floe had been in her way she must certainly have been smashed.

Yet not one of these men raised any objections; not one

suggested prudence. They were possessed by the love of danger and the unknown. So they sped on, not blindly but blinded, finding the frightful speed too slow for their impatience. Hatteras held the helm firmly in the midst of the waves foaming under the scourge of the tempest.

The vicinity of the coast began to be felt; strange indications appeared in the air. Suddenly the fog opened like a curtain ripped by the wind, and, like a flash of lightning, they could see a great plume of flames rising towards the sky.

"The volcano! The volcano!" The one cry rose to every lip; but already the fantastic vision had disappeared; the wind veered suddenly round to the south east, spun the boat off course, and drove her away from that inaccessible land.

"Curse it!" cried Hatteras. "We weren't three miles from the coast."

Though he could not resist the violence of the tempest, he would not yield to it; he altered course to take advantage of the wind which was blowing more furiously than ever. The boat often heeled over so far that her keel threatened to rise out of the water; then she contrived to right herself under the action of the rudder, like a steed that stumbles but is urged on by the rider's spur. Hatteras, with his hair tossed by the wind and his hand on the helm, seemed to be the soul of the barque and to be one with her, like a centaur of old.

• Suddenly, a frightful spectacle appeared before them. Less than ten cables' length away an iceberg was tossing on the foaming waves; it rose and fell like the boat, threatening to crush her in its fall or even by its touch. But with the danger of being hurled into the gulf came another, no less terrible; for the drifting iceberg was covered with white bears, crowded together and run with terror.

"The bears! The bears!" Bell cried in a choking voice; the others, no less appalled, saw what he had seen. The iceberg made frightful lurches, some so great that the animals rolled on top of one another. Their growls mingled with the roar of the tempest, so that a terrible concert rose

from that floating menagerie. If the ice-mountain overturned, the bears would certainly try to board the sloop.

For a quarter of an hour, that seemed as long as a century, boat and iceberg sailed along together, sometimes twenty cables apart, sometimes almost touching; sometimes the berg towered above the boat, so close that the bears could have dropped into it. The Greenland dogs shook with fright; Duk was unmoved.

Hatteras and his companions were silent; they did not even think of tacking about to get away from their frightful neighbours; they kept on their way with inflexible determination. A vague feeling, more like amazement than fear, had gripped them, and they admired that terrifying spectacle which had crowned the struggle of the elements.

At last the iceberg drifted gradually away, driven by the wind, which the boat's sails enabled her to resist; it disappeared into the fog, revealing its presence only by the distant growls of its monstrous crew.

At the same time the tempest redoubled in fury; the barque, rising out of the waves, began to spin with a giddy speed; her mainsail was torn off and sped away like a great white bird; a circular opening, a new maelstrom, had formed in the waves; the travellers, caught in the whirlpool, revolved so fast that notwithstanding their incalculable speed the lines of foam on the water seemed to be motionless. They were gradually sinking; at the bottom of the gulf some powerful force was drawing them down to swallow them up alive.

They rose to their feet and stared terrified at one another. Dizziness was about to master them when all at once the boat rose perpendicularly. Her bows reached the edge of the whirlpool; her speed cast her out from the centre of attraction; and escaping along the tangent of the circle, which was spinning about a thousand times a second, she was hurled clear with the speed of a cannon-ball.

Altamont, the doctor, Johnson, and Bell were thrown down. When they rose Hatteras had disappeared. It was two in the morning.

CHAPTER XXIII

THE FLAG OF ENGLAND

AFTER the first moment of astonishment a cry rose from the four men.

"Hatteras!" shouted the doctor.

"Vanished!" exclaimed Johnson and Bell.

"Lost!"

They stared around. Nothing was visible on the stormy sea. Duk barked despairingly; he wanted to throw himself into the waves and Bell could scarcely stop him.

"Take the helm, Altamont," said the doctor; "we must do all we can to find our poor captain!"

Altamont seized the helm, and the boat came back on her course. Johnson and Bell rowed vigorously. They spent an hour looking for Hatteras at the scene of the catastrophe, but in vain. The wretched captain, carried out by the tempest, was lost.

Lost, so near the Pole, so near the goal of all his ambition! The doctor shouted and fired his rifle, and to his voice was joined the distressful barking of Duk, but no reply came to the captain's two friends. Then a deep grief seized upon Clawbonny; his face sank into his hands, and his companions could hear him weeping.

So far from land, without oar or spar to cling to, Hatteras could not have reached it alive, and if he should at last touch the land he desired it would be as a mangled and swollen corpse. After an hour's search they had to keep on their route northwards and to battle against the last fury of the tempest.

At five in the morning of 11th July the wind calmed, the swell gradually lowered, the sky resumed its Polar clarity, and less than three miles away land appeared in all its splendour.

This new land was only an island, or rather a volcano

situated like a lighthouse at the North Pole. The mountain was in full eruption, and was vomiting a mass of burning stones and incandescent rock; it seemed to be shaken by repeated shocks like a giant breathing; the stones it hurled forth were cast high in the air in the midst of jets of intense flame. Streams of lava ran down its sides in headlong torrents; here flaming serpents writhed between the smoking rocks, there burning cascades fell into the midst of a purple vapour, and, farther down, a river of fire, formed of a thousand glowing streams, threw itself into the sea through a boiling estuary.

The volcano seemed to have only the one crater, from whence rose the column of fire, streaked by flashes of lightning, as though electricity had a share in this magnificent phenomenon. Above the flames swirled an immense cloud of smoke, red at its base, and black at the summit. It rose with incomparable majesty, and rolled aloft in dense columns. The sky had a cindery appearance, the darkness that had reigned during the tempest, and which the doctor could not explain, obviously came from the columns of ash spread out before the sun like an impenetrable curtain.

This enormous fire vomiting volcano, thrown up in the midst of the ocean, was a thousand fathoms high, about the same as Mount Hecla. A line from its base to its summit would form an angle of about eleven degrees with the horizon. As the sloop approached it, the volcano seemed to rise gradually from the depths of the waves. It showed no signs of vegetation, nor had it any coast, its sides falling straight into the sea.

"Can we land?" asked the doctor.

"The wind's driving us on to it," replied Altamont.

"But I don't see anywhere we could set foot on."

"We're too far off," answered Johnson; "but we'll easily find a creek for the boat, and that's all we want."

"Let's go there, then," Clawbonny replied sadly.

He no longer cared to look at the strange land before him. The Pole was there, but not the man who had discovered it!

A hundred yards from the rocks the sea was boiling

under the action of underground fire. The island it surrounded might measure eight or nine miles in circumference, but not more, and calculation showed it to be very near the Pole, even if the world's axis did not pass exactly through it.

On reaching the island the navigators noticed a miniature fiord just large enough to shelter their boat; they made direct for it, afraid that their captain's body had been thrown on to the coast by the storm. It would have been hard, however, for the body to stay upon it, for there was no shore, the sea washing against abrupt rocks; beyond the reach of the waves a thick layer of cinders, untrodden by any human foot, covered their surface.

At last the boat glided into a narrow cleft between two rocks, where she was completely sheltered from the surf. Then Duk's lamentable barking grew louder; the poor animal was calling the captain in the only language he knew, imploring the pitiless sea and the echoless rocks to give him back. His appeal was in vain, and the doctor was caressing him without being able to calm him, when the faithful animal, as if he meant to take his master's place, made a great leap and was first to land on the rocks amid a dust of cinders that arose in a cloud round him.

"Duk! Here, Duk!" shouted the doctor.

But Duk would not listen and went out of sight. They then carried on with the landing; Clawbonny and his companions stepped ashore, and the boat was securely moored. Altamont was just going to climb an enormous pile of stones when Duk was heard barking more loudly than usual some distance away. He was showing not anger but distress.

"Listen!" exclaimed the doctor.

"Is he on the track of some animal?" asked the boatswain.

"No, no!" Clawbonny shuddered. "He's lamenting—Hatteras's body must be there."

The four men followed Duk's trail through a cloud of blinding cinders. It brought them to a fiord where the waves died away about ten feet above sea-level. There Duk

was barking by the side of a corpse wrapped in the flag of England.

"Hatteras! Hatteras!" shouted the doctor, throwing himself upon his friend's body.

But then he uttered a cry. The body, though apparently lifeless, was stirring under his hand.

"He's alive! He's still alive!"

"Yes," replied a feeble voice. "Alive and on the Polar land where the tempest threw me! Hurrah for Queen's Island!"

"Hurrah for England!" the five men shouted together.

"And for America!" said the doctor, giving one hand to Hatteras and the other to Altamont.

Duk likewise shouted "Hurrah" in his own way, which was as good as any other. For the first few minutes the travellers gave themselves up to their delight at seeing their captain again, especially when the doctor examined him and found that his wounds were slight.

The wind had carried Hatteras to part of the shore where landing was dangerous; he had been swept out to sea several times, but at last he had succeeded in holding on to a piece of rock and hauling himself out of the waves. There he had lost consciousness after wrapping himself in his flag, and he had come to himself only when he felt Duk's caresses and heard his barking. After his wounds were dressed, he was able to get up and walk, helped by the doctor's arm, to the boat.

"The Pole! The North Pole!" he repeated.

"You're happy at last!" the doctor told him.

"Yes, I am! And you, my friend, do you not feel happy just at being here? This land we are treading, it's that of the Pole! The sea we've just crossed is the Polar sea! The air we're breathing is Polar air! It's the North Pole! The North Pole!"

Hatteras was a prey to a violent excitement, almost a fever, and the doctor tried vainly to calm him. His eyes shone with extraordinary brilliancy, and his thoughts were boiling in his brain. Clawbonny regarded his over-excitement as being due to the peril he had just

braved. He plainly needed rest, and they looked about for a camp-site.

Altamont soon found shelter in the rocks, which had collapsed to form a cave; Johnson and Bell carried the food into it, and freed the Greenland dogs. Towards eleven everything was ready for the meal; the tent-cloth served as a tablecloth; the breakfast, consisting of pemmican, salt meat, tea, and coffee, was spread out on the ground, ready to be eaten.

But first Hatteras insisted on finding the position of the island, so the doctor and Altamont took their instruments and ascertained that the cave was situated at $89^{\circ} 59' 15''$ N. The longitude did not matter, for a few hundred feet higher all the meridians met.

So the island was situated exactly at the North Pole, and the ninetieth degree was only forty five seconds away, just three quarters of a mile, at the very summit of the volcano.

When Hatteras knew this result he wanted it to be set out in an official report, written in duplicate and placed in a cairn on the shore. So the doctor took his pen, and there and then he drew up the following document, one copy of which is now in the archives of the Royal Geographical Society of London:

"This 11th day of July 1861, at north latitude $89^{\circ} 59' 15''$, Queen's Island was discovered, at the North Pole, by Captain Hatteras, commander of the brig *Forward*, of Liverpool; whoever finds this document is requested to send it to the Admiralty

(Signed)

JOHN HATTERAS, Commander of the *Forward*
DR. CLAWBONNY

ALTAMONT, Commander of the *Porpoise*
JOHNSON, Boatswain
BELL, Carpenter."

"Now, my friends, to breakfast," said the doctor gaily.

CHAPTER XXIV

A COURSE IN POLAR COSMOGRAPHY

It goes without saying that they had to sit on the ground, which had also to serve as their table.

"But," said Clawbonny, "who wouldn't give all the tables and all the dining-rooms in the world to dine at eighty-nine degrees fifty-nine minutes fifteen seconds north?"

Their minds were dominated by thoughts of the Pole. The dangers they had risked to reach it, the dangers they had to face going back, all were forgotten in this unprecedented triumph. What neither the ancients nor the moderns, neither Europeans, Americans, nor Asiatics, had been able to do, they had done. The doctor was listened to attentively while he related all that science and his inexhaustable memory could tell him about their present position. It was with real enthusiasm that they drank the toast he proposed.

"John Hatteras!" he said.

"John Hatteras!" his companions replied with one voice.

"The North Pole!" the captain responded, in tones that seemed strange coming from one who until now had shown himself so cold and self contained, but was now plainly over-excited. They clinked their cups together and the toasts were followed by warm hand-shaking.

"This is the most important geographical event of our time!" declared the doctor. "Who would have said that this discovery would precede those of the centre of Africa and Australia? Indeed, Hatteras, you have done more than Sturt, Livingstone, Burton, or Bath! All honour to you!"

"You're right, Doctor," replied Altamont; "its difficulty made it seem likely that the North Pole would be the last part of the world to be discovered. Whenever any government is absolutely determined to find the centre of Africa,

it's bound to succeed, given enough men and money; but here nothing seemed less certain than success, and we might have met with absolutely insuperable obstacles."

"Insuperable!" Hatteras cried vehemently; "there are no insuperable obstacles; there are wills more or less determined, that's all!"

"Well," said Johnson, "we're here all right, but I wish Dr. Clawbonny would tell me what's so special about this Pole!"

"What's so special, Johnson, is that it is the only motionless point on the globe, all the others revolving with headlong speed."

"But I can't see that we're any more motionless here than in Liverpool!" protested Johnson.

"Because neither here nor in Liverpool would you notice any movement, for you yourself are sharing in the movement or state of rest! But that doesn't make it less certain. The earth rotates once in twenty-four hours, and this movement is supposed to take place round an axis whose ends pass through the North and South Poles. Well, we are at one of these ends, and it's bound to be motionless."

"Then," said Bell, "while all our countrymen are spinning round, we're standing still."

"Very nearly, for we're not quite at the Pole."

"You're right, Doctor," Hatteras said gravely; "there's still forty-five seconds to cross before we reach the exact point."

"That isn't much," Altamont pointed out; "we may consider ourselves as motionless."

The doctor was always as glad to give information as the others were to receive it, and the talk became a somewhat desultory conversation on various relevant points of astronomy. It passed from the rotation of the earth and its movement round the sun, with its effects on the seasons, to the comparative weight of earth, moon, and sun, and to the precession of the equinoxes.

In the course of the discussion, Clawbonny mentioned a theory put forward by certain savants that the Pole had once been where the equator is now, and the equator at the Pole.

"How did they explain the alteration?" Altamont wanted to know.

"By contact with a comet. The comet is the *Deus ex machina*; every time a question is raised in cosmography a comet is called in to help. It's the most obliging star I know, and at the least gesture of a savant it puts itself out to settle everything!"

"You were saying just now that the earth is flattened at the Poles," put in Johnson a little later. "Would you tell us about that, Dr. Clawbonny?"

"It's like this, Johnson. As the earth was fluid when it was first formed, you will understand that its rotation was bound to send part of its material towards the equator, where the centrifugal force was stronger. If the earth had been motionless it would have stayed a perfect sphere, but because of the process I've just told you about it took an ellipsoidal shape, so that the Poles are about five leagues nearer to the centre than the points along the equator."

"Then," said Johnson, "if our Captain wanted to lead us to the centre of the earth, we'd have five leagues less to go?"

"Exactly "

"Well, Captain, that's the way to go! Here's a chance we ought not to miss . . ."

But Hatteras did not reply. Either he was taking no part in the conversation, or else he was listening without paying any attention to it.

After they had discussed the comparative weight of objects at different points on the earth's surface, the doctor told them that though his weight was normally two hundred pounds, on the moon he would weigh only thirty-two pounds, whereas on the sun he would weigh over five thousand.

"And the moral of all that is," he concluded, "that we are very well off where we are, and it's useless to want to go anywhere else."

"You were telling us a little while back," said Altamont, "that this would be a good place to start a journey to

the centre of the earth! Has anyone really thought of making such a trip?"

"Yes, and that will finish all I've got to say regarding the Pole. There's no place in the world which has given rise to so many hypotheses and chimeras. The ancients, who knew nothing of cosmography, placed the Garden of Hesperides at it. In the Middle Ages people fancied that the earth was supported by gudgeons at the Poles, on which it rotated; but when comets were seen travelling freely above the circumpolar regions, that kind of support had to be given up. Later there was a French astronomer, Bailly, who believed that the inhabitants of Plato's Atlantis used to live here."

"In modern times it's even been suggested," he continued, "that there's a great opening at the Poles; it's through this that the light of the aurora borealis emerges, and you could get down through it into the interior of the earth. There, within the hollow sphere, were thought to be two planets, Pluto and Proseipine, and the air was supposed to be made luminous by its own pressure."

"They said all that?" asked Altamone.

"They wrote it, and quite seriously, too. Captain Symmes, one of your compatriots, asked Humphrey Davy, Humboldt and Arago to try to make the trip. But all those savants refused."

"That was just as well."

"I think so, too. But however that may be, you can see, my friends, that imagination has been given a free rein about the Poles, and that sooner or later we've to get back to the plain facts."

"Anyhow, we'll soon see," said Johnson, unwilling to give up his idea.

"Well, we'll leave our travels till tomorrow," replied the doctor, amused to see how unconvinced the old sailor was. "And if there is a special opening which leads to the centre of the earth, we'll all go down it together!"

CHAPTER XXV

MOUNT HATTERAS

AFTER a long talk, they settled down as best they could in the cave and were soon asleep.

All but Hatteras. Why couldn't that amazing man sleep? Hadn't he achieved the mighty project so dear to his heart? Why was it that calm did not replace agitation in that ardent soul? Was it not to be expected that, his projects accomplished, he would have suffered a reaction and that his over-tensed nerves would crave for rest? After his triumph it might even seem natural that he should experience a feeling of sadness, which so often follows the fulfilment of desire.

But no, he still seemed over-excited. It was not the thought of the return journey that moved him so much. Did he want to go even farther? Had his ambition as a traveller no bounds, and would he find the world too small now that he had gone round it?

Whatever the reason, he could not sleep. And yet that first night at the Pole was fresh and calm. The island was completely uninhabited. There was not a bird in the flaming air, not an animal on the cindery soil, not a fish in the seething waters. Alone from the distance came the roar of the mountain, above whose head rolled the plume of incandescent smoke.

When Bell, Johnson, and the doctor awoke, Hatteras was not with them. They anxiously left the cave and saw him standing upon a rock, his eyes rigidly directed at the summit of the mountain. In his hand were his instruments; evidently he had just taken its bearings.

The doctor went over to him and spoke to him several times before he succeeded in arousing him from his meditation. At last the captain seemed to understand.

"Come on," said the doctor, who was watching him

attentively. "Let's go round the island for our final exploration."

"Final?" said Hatteras with that intonation peculiar to people who are thinking out loud. "Yes, the final, certainly. But," he added excitedly, "the finest!"

As he spoke he pressed his hands over his forehead with both hands, as if to calm some internal excitement.

As Altamont, Johnson, and Bell reached him, Hatteras seemed to emerge from his state of hallucination.

"My friends," said he in a moved tone, "I thank you for your courage, for your perseverance, and for the superhuman efforts that have enabled us to set foot upon this soil."

"Captain," replied Johnson, "all we've done was to obey; all the honour is yours alone"

"No, no!" continued Hatteras with emotion. "It belongs to all of you as much as to me! To Altamont as much as to the rest of us; as to the doctor himself—oh, how can I express my joy and gratitude to you all?"

He gripped the hands of his stalwart companions, and strode up and down, seemingly unable to contain himself any longer.

"We have only done our duty as Englishmen," Bell told him.

"And as friends," added the doctor.

"Yes, but that duty—not all of them did it, some of them failed. But we must forgive them, those who betrayed us and those who let themselves be dragged into treachery! Poor fellows! I forgive them all. You hear, me Doctor?"

"Yes," answered the doctor, who was getting very uneasy at the captain's excitement.

"So," Hatteras continued, "I don't mean them to lose the little fortune they came so far to seek. No! None of my arrangements shall be altered and they shall be rich—if ever they see England again!"

It would have been difficult not to be moved by his tones as he uttered these words.

"Why, Captain," said Johnson, jokingly, "anyone would think you were making your will."

"Perhaps I am," Hatteras replied gravely.

"But you've still got a long and glorious life before you yet," the old sailor continued.

"Who knows?" answered Hatteras.

These words were followed by a fairly long silence. The doctor dared not interpret their significance.

But Hatteras soon made his meaning clear; he continued excitedly: "My friends, listen to me. We have done well so far, but there's still much to do."

His companions looked at one another in the deepest amazement.

"Yes, we are on Polar land, we're not at the very Pole!"

"Why not?" asked Altamont.

"I don't know where we are, then," said the doctor, who feared to guess what Hatteras meant.

"Yes!" the captain replied violently. "I have said that an Englishman should set his foot on the Terrestrial Pole, and an Englishman shall do it."

"What!" exclaimed the doctor.

"We're still forty-five seconds from that unknown spot," Hatteras continued with mounting excitement, "and it's there I shall go."

"But it's the summit of the volcano!" protested the doctor.

"I shall go."

"It's an inaccessible cone!"

"I shall go."

"It's a gaping flaming crater!"

"I shall go."

The energetic conviction with which Hatteras uttered these last words cannot be expressed. His friends were in consternation; they gazed in terror at the mountain, whose fiery plume was swaying in the air.

The doctor insisted; he urged Hatteras to renounce his plan; he said everything his heart could suggest, from the most humble prayer to friendly threats; but he made no impression on the captain, the victim of what might well be called Polar madness.

Nothing but violence would have sufficed to stop that

madman who insisted on rushing to his death. But foreseeing that its effects would be harmful the doctor did not wish to use it save in the last extremity. He hoped that physical impossibilities, insuperable obstacles, would keep Hatteras from carrying out his plan.

"Well, if you must go," he decided, "we'll follow you."

"Yes," replied the captain, "half-way up the mountain! No farther! Haven't you got to take back to England one of the official reports of our discovery, if——"

"But——"

"It's settled," Hatteras answered inflexibly, "and as the wishes of a friend are not sufficient, the captain commands."

The doctor did not like to insist further, and a few minutes later the little troop set off, equipped for a difficult climb and preceded by Duk.

The sky was a brilliant blue. The thermometer was at 52° and the atmosphere had that clarity peculiar to these high latitudes. It was eight in the morning.

Hatteras went ahead with his gallant dog; Bell and Altamont, the doctor and Johnson, followed him closely.

"I'm afraid," whispered Johnson.

"No, no, there is nothing to be afraid of," replied the doctor; "we're here."

Whence did that remarkable islet get its strange appearance, suggestive of the unforeseen, of newness and youth? The volcano did not seem old, and geologists would have been able to assign a recent date to its formation.

The rocks, piled up together, kept in their places by a miracle of equilibrium. The mountain was, indeed, nothing but a pile of stones fallen from on high. No earth, not a scrap of moss, not the most lowly lichen, not the slightest trace of any vegetation. The carbon dioxide vomited by the crater had not had time to unite with the hydrogen in the water and the ammonia in the clouds to form organic matter under the action of light.

This island, lost in the open sea, was solely due to the gradual piling up of volcanic matter, just as several of the earth's mountains have been formed. What they threw

up from their own depths sufficed to build them. Thus Etna has ejected a volume of lava greater than its own bulk, and Monte Nuovo, near Naples, was formed of volcanic ash in the short space of forty-eight hours.

The mass of rocks that formed Queen's Island had evidently risen from the bowels of the earth; it showed the Plutonic characteristics in the highest degree. Here had formerly stretched the immense sea formed in the beginning by the condensation of watery vapours on the cooling earth; but as the volcanoes of the old and new worlds died out, or rather blocked themselves up, new fire-belching craters took their place.

The earth may be likened to a vast spheroidal boiler. Here, under the influence of the central fire, are formed immense quantities of vapour confined at a pressure of thousands of atmospheres, ready, but for the safety-valves leading to the exterior, to blow up the world. These safety-valves are called volcanoes; when one of these valves close another opens, nor is it surprising that at the Poles, where, no doubt because of the flattening, the earth's crust is thinner, a volcano should have been suddenly produced by the rising of the rocks above the waves.

As he followed Hatteras, the doctor noticed these strange facts. His foot was treading on a volcanic tuff and layers of pumice made of scoria, cinders, and eruptive rocks similar to the syenities and the granite of Iceland. But if he assigned a recent origin to the island, it was because no sedimentary earth had yet had time to form.

Water was also lacking. If Queen's Island had counted many centuries of existence, thermal springs would have gushed from its depths, as they do in the neighbourhood of volcanoes. Not only was there not a drop of water here but the vapours which hung above the lava streams seemed completely anhydrous.

Thus the island was of recent formation, and as one day it had appeared, so at another it might disappear anew into the depths of the sea.

The higher they got, the more difficult grew the ascent; the sides of the mountain became almost perpendicular,

and the greatest precaution had to be taken to avoid causing dangerous falls of rock. Columns of cinders often swirled round the explorers, threatening to suffocate them, or torrents of lava barred their way. On some of the level stretches the upper part of the streams had cooled and solidified, and the boiling lava flowed over their hardened crust, so that here the travellers had to probe the ground to avoid being plunged into the molten burning streams.

From time to time the crater vomited forth rocks, reddened by the flaming gas; some of them burst in the air like cannon balls, fragments being thrown to enormous distances in every direction. All these dangers showed the madness of attempting the ascent.

Yet Hatteras climbed on with amazing agility; disdaining the help of his iron-shod stick, he unhesitatingly scaled the steepest slopes.

He at last reached a circular rock, a sort of plateau about ten feet across; an incandescent river surrounded it, divided by another rock and leaving only a narrow passage, along which he skilfully made his way. There he stopped, and his companions came up to him. Then he seemed to measure with his eye the distance yet to be traversed; horizontally he was about a hundred fathoms from the crater—to the mathematical position of the Pole; but vertically he had still fifteen hundred feet to surmount.

The climb had already lasted three hours; Hatteras did not seem fatigued; his companions were almost spent. The summit of the volcano seemed quite inaccessible. The doctor made up his mind, at any price, to stop Hatteras from going any higher. He tried at first to reason with him, but the captain's excitement seemed to have passed into delirium; during the climb he had shown signs of increasing madness, at which those who had known him and followed him in the varied phases of his existence would not have been surprised. The higher he climbed, the more his excitement grew; he no longer lived in the world of man: he felt he was growing like the mountain itself.

"Hatteras," the doctor told him. "this is enough; we can't go any farther."

"Stay here, then," the captain answered in strange tones; "I shall go higher still."

"No! What you are doing now is useless! You're at the Pole here!"

"No, no! Higher!"

"It's your friend Clawbonny talking to you, Hatteras! It's Dr. Clawbonny; don't you know me?"

"Higher! Higher!" replied the madman.

"Then we won't let——"

The doctor had not finished speaking when Hatteras, by a superhuman effort, leapt over the lava stream out of his companions' reach. They gave a cry of dismay, for they thought he was engulfed in the torrent of fire; but the captain had reached its far side, followed by Duk, who refused to leave him. He vanished behind a curtain of smoke, and they heard his voice dying away as he shouted: "To the North! To the North! To the top of Mount Hatteras! Remember Mount Hatteras!"

The others could not dream of following him; there were twenty chances of falling where he had passed with that luck and skill peculiar to the insane. It was impossible to leap over the fiery torrent, and equally impossible to get round it. Altamont tried vainly to cross and almost perished in the attempt; his companions had to hold him back.

"Hatteras! Hatteras!" the doctor shouted

The captain did not answer, and Duk's faint barking alone could be heard on the mountain-top. But Hatteras appeared at intervals through the columns of smoke and beneath the rain of cinders. Sometimes his arm, sometimes his head, emerged through the swirl. Then he vanished, to reappear still higher clinging to the rocks. His height diminished with the fantastic rapidity of objects rising upwards. Thirty minutes later he seemed only half his real size.

The air was filled with the heavy din of the volcano; the mountain resounded and roared like a furnace; its sides could be felt trembling. Followed by Duk, Hatteras was still climbing on.

From time to time a landslip occurred behind them, and some enormous rock, with ever-growing speed, rebounded on the crests into the Polar Sea.

Hatteras did not even look round. He was using his climbing-pole as a staff, to which he had fastened the English flag. His terrified companions watched all his movements. His size became almost microscopic, and Duk looked no larger than a big rat.

There came a moment when the wind blew a vast curtain of flame upon them. The doctor gave a cry of agony; but Hatteras reappeared, still waving his flag.

The sight of this fearful climb lasted more than an hour. An hour of struggle against unstable rocks and beds of cinders, in which this impossible hero vanished to his waist. Sometimes he crouched down to crawl against the jagged mountain-sides or swung himself along by his hands, swaying in the wind like a dried leaf.

At last he arrived at the summit of the volcano, at the very opening of the crater. The doctor then hoped he would return, and again he shouted: "Hatteras! Hatteras!"

The doctor's cry stirred Altamont to the very depths of his soul. "I'll save him!" he cried, and with a leap he cleared the torrent of fire at the risk of falling into it, and disappeared amid the rocks. Clawbonny had no time to stop him.

Hatteras, now at the very summit of the mountain while stones rained around him, was advancing above the gulf along an overhanging rock. Duk was still following him. He was waving his flag, lit up by the flames, and the deep red of its bunting stood out boldly in the blast from the crater. With one hand he displayed it, while with the other he pointed to the zenith, to the Pole of the celestial sphere. But he still seemed to be doubtful. He was still seeking that mathematical point where all the meridians meet, and on which, in his sublime madness, he wished to set his foot.

Suddenly the rock gave way beneath him. A terrible cry from his comrades rose to the summit of the mountain. A second, a century, went by. Clawbonny felt that his

friend had perished, that he was for ever swallowed up in the depths of the volcano.

But Altamont was there and Duk with him! The man and the dog had seized the poor fellow just as he was disappearing into the abyss. Hatteras was saved, saved in spite of himself, and half an hour later the captain of the *Forward*, void of all feeling, was held in his companions' arms.

When Hatteras came to himself the doctor looked into his eyes in mute agony. But he met only a blank stare, like that of a man who looks without seeing, nor makes any response.

"Good God," said Johnson, "he's blind!"

"No!" answered Clawbonny. "No, my poor friends, we've only saved his body! His soul has stayed on top of the volcano! His mind is dead!"

"Mad!" cried Johnson and Altamont in consternation.

"Mad!" answered the doctor; and the tears flowed from his eyes.

CHAPTER XXVI

THE RETURN SOUTHWARD

THREE hours after this sad end to the adventures of Captain Hatteras his comrades were back in the cave at the foot of the volcano. There Clawbonny was asked what would be best to do.

"We can't stay any longer on Queen's Island," he explained, "the sea is open before us and we have plenty of food; we must hurry back to Fort Providence, and winter there until next summer."

"That's my opinion, too," agreed Altamont; "the wind's favourable and we'll put to sea again tomorrow."

The day passed sadly. The captain's madness seemed a tragic warning, and when Johnson, Bell and Altamont thought of the return journey, the prospect alarmed them; they missed his daring spirit. But as energetic men they prepared for a fresh struggle with the elements—and with themselves if ever they felt discouraged. Next day, Saturday, 13th July, the gear was embarked, and everything was soon ready for departure.

But before leaving the rock they were never to see again, the doctor, following Hatteras's instructions, had a cairn made on the very spot where he had landed: it was built of great heaped-up boulders so as to form a prominent landmark so long as the eruption respected it. On one of its side-faces Bell chiselled out this simple inscription:

"JOHN HATTERAS

1861"

The official report was placed in a tin box, hermetically sealed, and deposited within the cairn, so that proof of the great discovery was left on the deserted rocks.

Then the four men and the captain—a mere body without a soul—and his faithful Duk, sad and whining plaintively, embarked for the return journey. A new sail was fashioned out of the tent cloth, and at ten in the morning the boat, running before the wind, left Queen's Island. That evening the doctor, standing erect, looked for the last time at Mount Hatteras, aflame on the horizon.

The voyage went well; the sea was completely open, and navigation simple; it seemed much easier to fly from the Pole than to approach it.

But Hatteras was in no condition to understand what happened around him; he lay in the boat, his mouth silent, his eyes dull, his arms crossed on his chest, and Duk lying at his feet. It was in vain that the doctor spoke to him: Hatteras did not hear.

For forty-eight hours the wind was favourable, and the sea nearly calm. On 15th July they sighted Altamont Harbour to the south; but as the Arctic Ocean was free from ice all along the coast they decided not to cross New America on the sledge but to cruise round it, and to reach Victoria Bay by sea, a quicker and easier journey. A distance that had taken them a fortnight to traverse with their sledge they accomplished in a week with the boat, and after having followed the sinuosities of a coast with numerous inlets, and thus learned its topography, they arrived at Victoria Bay on 23rd July.

The boat was safely anchored to the shore, and they all hurried to Fort Providence. But what devastation! Doctor's House, the stores, the magazine, and the fortifications had melted under the sun's rays, and the food had been ransacked by wild animals. It was a distressing and disappointing sight, for the travellers had come almost to the end of their supplies, and had relied upon renewing them at Fort Providence. It was plainly impossible to spend the winter there. Like people used to making rapid decisions, they decided to take the shortest route to Baffin Bay.

"It's the only thing we can do," said the doctor. "The bay is only six hundred miles off; we can sail so long as

there's enough water for our boat, and by way of Jones's Strait to the Danish settlements."

"Yes," answered Altamont, "we must collect all the food that's left and set out at once."

After a careful search, they found a few cases of pemmican scattered here and there, and two barrels of preserved meat which has escaped destruction—in all, food for six weeks and a fair supply of powder. Soon it had all been collected; they spent a day caulking the boat, and on the morrow, 24th July, they again put out to sea.

Near 83° N. the coast trended eastwards. It seemed likely that it might meet the regions known as Grinnell Land, Ellesmere Land and North Lincoln Land, which form part of the coast of Baffin Bay. They felt sure that, like Lancaster Strait, Jones's Strait would open into the inland seas.

The boat sailed on without overmuch difficulty. The doctor, foreseeing possible delays, put them on half-rations, but as they had nothing to over-tire them their health continued good. Besides, they were able to make some use of their guns; they killed a few ducks and geese and guillimots, which supplied them with fresh wholesome food. They replenished their supply of water at the fresh-water icebergs they met with; they took care not to go too far from the coast, as their boat was in no state to face the open sea.

• At that season the thermometer kept above freezing point; from being rainy the weather became snowy and grew dark; the sun was already beginning to graze the horizon, and more of its disc was bitten into every day. On 30th July the travellers lost sight of it for the first time, so that they had a night a few minutes long.

But the boat went well, and sometimes made a daily run of sixty to sixty-five miles; they did not stop even for a moment; they knew what fatigues they would have to endure, what obstacles to cross. If they had to take to the land, the narrowing sea would soon completely close;

already some young ice was forming. In these high latitudes winter soon follows summer: there is neither spring nor autumn; the intermediate seasons are lacking, so they must hurry.

On 31st July, the sky being clear at sunset, they noticed the first stars in the constellations overhead. From that day a continual fog prevailed, and made navigation difficult. The doctor grew very uneasy at seeing the increasing signs of winter; he knew what difficulties Sir John Ross had met with in reaching Baffin Bay after abandoning his ship; but at least Ross had had a shelter against the bad season, food and fuel.

If such a misfortune were to befall the survivors of the *Forward*, if they had to stop or go back, they would be lost; the doctor said nothing of his anxiety to his comrades, but he urged them to press on eastwards.

At last, on 15th August, after having struggled for forty eight hours with the ice accumulating in the leads, after having risked their fragile boat a hundred times, they were completely halted and unable to go on. All around them the sea was frozen, and the thermometer was 15° above zero. Everywhere in the north and east the proximity of land can easily be recognized by the little round flat lumps of ice which the waves wear from the shores; and here fresh-water ice is also more frequently met with. Altamont took their bearings with scrupulous care—77° 15' N. by 85° 02' W.

"Now we know exactly where we are," explained the doctor; "we've reached North Lincoln Land, just off Cape Eden. We're about to enter Jones's Strait; if we'd been a little more fortunate we'd have found it free as far as Baffin Bay. But we mustn't complain. If poor Hatteras had met with such conditions at the outset he would soon have got to the Pole. His crew wouldn't have abandoned him, and his reason wouldn't have been lost through his terrible anxieties."

"Then there's only one thing for us to do," replied Altamont; "abandon the boat, and reach the east coast of Lincoln Land on the sledge."

"Yes, we've got to leave the boat and take to the sledge," said the doctor, "but instead of crossing Lincoln Land, I suggest crossing Jones's Strait over the ice and reaching Devon Island."

"Why?" asked Altamont.

"Because the nearer we get to Lancaster Strait the more chance we've got of meeting the whalers."

"You're right, Doctor, but I am afraid the ice isn't closed up enough for us to get across it."

"We'll try," Clawbonny decided

The boat was unloaded; Bell and Johnson assembled the sledge; all its parts were in perfect condition. Next day the dogs were harnessed, and the travellers went along the coast towards the ice-field.

Then began the fatiguing and slow journey so often described before. Altamont had been right to distrust the ice. They could not get through Jones's Strait, and had to coast off Lincoln Land.

On 21st August, by cutting across country, they reached the entrance of Glacier Strait. There they ventured on the ice-field, and next day reached Cobourg Island, which they crossed in less than two days in spite of violent snowstorms. Then they were able to take the easier route across the ice-fields and at last, on 24th August, they set foot on Devon Island.

"Now," said the doctor, "we have only to cross this island and reach Cape Warrender at the entrance of Lancaster Strait."

But the weather became frightful and very cold; the snowstorms resumed their winter violence. The travellers began to feel at the end of their strength. The provisions were running out, and they had to put up with one-third rations so that the dogs might have enough food to work

The nature of the ground added much to the fatigues of the voyage. Devon Island being extremely irregular, they had to cross the Trauter Mountains through very difficult passes while battling with the unchained elements. The sledge, the men and the dogs were in need of rest, and more than once despair descended upon this little

troop, hardened though they were and accustomed to the fatigues of a Polar expedition.

But, without realizing it, the poor fellows were worn out, physically and morally. Eighteen months of endless fatigue and a nerve-wracking succession of hopes and despairs are not to be borne with impunity. Moreover, to set out brings an energy, a conviction, and a faith which are lacking on the return journey. The poor wretches dragged themselves along, walking from sheer habit, using the remnants of their animal energy almost independent of their will.

It was not until 30th August that they emerged from this chaos of mountains, so unlike those in more temperate regions, half frozen and badly knocked about. The doctor could hardly keep up the courage of his companions, and he felt himself giving way.

The Trauter Mountains led them into a sort of plain, itself affected by the convulsion that had caused the first upheaval of the mountains. There the travellers were forced to take a few days' rest being unable to put one foot before the other, and two of the Greenland dogs died of exhaustion. They sheltered behind an ice mound in a cold of 2° below zero; none of them having the strength to raise the tent. Their provisions were nearly run out, and in spite of the frugality of their rations these could not last more than another week. Game had become scarce; it had departed for the winter to climates less rude. Death from hunger threatened its exhausted victims.

Altamont, who had all along shown great self sacrifice and devotion, took advantage of what strength he had left to set out hunting. He took his gun, called Duk, and went off into the northern plains. The doctor, Johnson, and Bell watched him go almost with indifference. For an hour they did not hear even one shot; then they saw him rushing back like someone appalled.

"Whatever's the matter?" the doctor asked.

"Down there! Under the snow!" replied Altamont, in tones of horror, as he pointed to the horizon.

"A whole troop of men."

"What?"

"Living?"

"Dead! . . . Frozen! . . . And even——"

The American dare not finish his sentence, but his face expressed the most unutterable horror. Roused by these tidings, the doctor, Johnson, and Bell got up and dragged themselves in Altamont's tracks towards the part of the plain his gesture had indicated. Soon they reached the bottom of a deep ravine, and there, how dreadful was the sight that met their eyes!

Corpses, already stiff, half buried in their white shroud; here an arm, there a leg, at some distance hands clenched together, and faces still retaining a threatening and despairing look.

The doctor went up to them and then, while Duk emitted sinister howlings, he recoiled, pale and horror stricken.

"Oh, horrible!" he exclaimed.

"What?" asked the boatswain

"Can't you recognize them?" asked the doctor.

"What do you mean?"

"Look!"

This ravine had recently formed the scene of a last struggle of man with the weather, with despair, even with hunger, for certain horribl^e remains showed the newcomers that the unfortunate men had been eating human flesh. Among them the doctor had recognized Shandon, Pen, the wretched crew of the *Forward*: their strength had failed; their supplies had given out, their boat had probably been smashed by the avalanches or hurled into a gulf, so that they had been unable to take advantage of the open sea. It might be supposed, too, that they lost their way on these unknown lands. Moreover, men who had set out excited with revolt could not long remain united in that fellowship which alone makes great things possible. The leader of a mutiny never has more than doubtful authority, and no doubt Shandon's leadership had soon been overthrown.

However, that may be, the crew had evidently undergone

a thousand tortures before suffering that frightful catastrophe; but the secret of their misery is for ever buried in the Polar snows.

"Let's get away!" Let's get away!" exclaimed the doctor.

He dragged his companions from the scene of disaster. Their horror gave them a momentary energy, and they set out once more.

CHAPTER XXVIII

CONCLUSION

WHAT good would it do to dwell on the endless misfortunes endured by the survivors of the expedition? They themselves could never remember in detail the events of the week that followed the horrible discovery of all that was left of the *Forward's* crew. But on 9th September, by a miracle of energy, they reached Cape Horsburg, at the end of Devon Island.

They were dying of hunger; they had not eaten for forty eight hours, and their last meal had come from the flesh of the one remaining Esquimaux dog. Bell could go no farther, and old Johnson felt he was dying.

They were now on the shore of Baffin Bay, then partly frozen in, so that they were on the road to Europe. At three miles from the coast the waves dashed noisily against the ice-field. There they would have to wait for the doubtful chance that a whaler might pass that way, and for how long? But Heaven took compassion on the wretched men, for on the next day Altamont distinctly saw sail on the horizon.

They experienced all the anguish that accompanies such an experience. The vessel seems to be alternately approaching and going farther away. Thus arise horrible alternations of hope and despair; and too often, just when the ship wrecked men fancy themselves safe, the sail disappears slowly over the horizon.

The doctor and his companions suffered all these trials; they arrived on the western boundary of the ice-fields, helping and urging one another on, only to see the ship gradually sail away without noticing them. They shouted, but in vain.

It was then that the doctor had one last inspiration. An iceberg, gripped by the current, had drifted against the ice-field.

"This iceberg," he exclaimed, pointing at it.

The others could not understand him.

"Get on it! Get on it!" he told them.

It was like a ray of hope.

"Oh, Dr. Clawbonny!" said Johnson, as he kissed the doctor's hands. Altamont and Bell ran to the sledge; they brought back one of its runners, fastened it on the iceberg to serve as a mast, and secured it with ropes; they tore the tent up to make a sail. The wind was favourable, and the men hurried on to their frail raft and put to sea.

Two hours later, after unheard-of efforts, the last survivors of the *Forward* were welcomed on board the *Hans Christien*, a Danish whaler, then making for Davis Strait. The captain hospitably received these spectres, who had almost ceased to look like human beings. At the sight of their sufferings his crew realized their history, tended them most carefully, and at last succeeded in saving their lives.

Ten days later Clawbonny, Johnson, Bell, Altamont, and Captain Hatteras landed at Korsøeur, in Seeland, Denmark; a steamboat took them to Kiel; thence, by way of Altona and Hamburg, they reached London. Here they arrived on the thirteenth, barely recovered from the trials they had endured.

The doctor's first care was to ask the Royal Geographical Society to let him place a communication before them, he was admitted to their next session.

The astonishment of that learned assembly, and their enthusiastic reception of Hatteras's document, can well be imagined.

This voyage, unique in kind, with no precedent in history, summed up all the previous discoveries made in the circum-polar regions; it linked together the achievements of Parry, Ross, Franklin, and McClure; it completed, between the 100th and the 115th meridians, the map of the hyperborean countries, and finally it led to that hitherto inaccessible point, the Pole.

Never had news so unexpected burst upon an astonished England. Her people felt proud, from the lord to the cockney, from the merchant prince to the workman at the docks.

The news of the great discovery flashed along all the

telegraph wires of the United Kingdom with the speed of lightning. The newspapers inscribed the name of Hatteras at the head of their columns as that of a martyr, and England throbbed with pride.

The doctor and his companions were formally presented by the Lord Chancellor to Her Gracious Majesty. The Government confirmed the names of Queen's Island for the rock at the North Pole, Mount Hatteras for the volcano, and Altamont Harbour for the harbour on New America.

Altamont did not leave his companions in suffering and glory, now become his friends; he followed them to Liverpool, whose people hailed their return, after having so long given them up as dead and swallowed up in the eternal snows.

Doctor Clawbonny always gave the whole glory of the expedition to the man who above all deserved it. In the narrative of his voyage, entitled *At the North Pole*, published in the following year by the Royal Geographical Society, he declared John Hatteras to be the equal of the greatest explorers, the rival of the daring men who sacrifice their all to the progress of science.

Meanwhile, that sad victim of a glorious passion lived peacefully in the mental home of Sten Cottage, near Liverpool, where his friend the doctor had placed him. His insanity was quite harmless, but he never spoke; he understood nothing and his speech seemed to have left with his reason. One feeling alone united him to the outside world, and that was his friendship for Duk, from whom nobody wished to part him.

His malady, his "Polar madness", quietly followed its course and showed no special symptom, until one day Dr Clawbonny, who often visited his poor friend, realized what he was doing.

Hatteras, followed by his faithful dog, who watched him with sad affectionate eyes, would walk about for long hours every day; but his walk always took him in one special direction, that of a certain alley of Sten Cottage. When he reached the end of the alley he returned down it backwards. If anyone stopped him he pointed to a certain spot in the

sky. If anyone tried to make him turn round he grew annoyed, while Duk, who shared his anger, barked furiously.

The doctor carefully studied so strange a mania, and at last he saw the reason for it; he realized why the walk was always made in the same direction, and, so to speak, under the influence of a magnetic attraction.

Captain John Hatteras was still marching the north!

EDITORIAL POSTSCRIPT

IF Verne had become a yachtsman before writing this story instead of after, he would probably have amended its *glacial*. A little practical experience of navigation would have shown him that, with the instruments of the time, his explorers could not possibly have taken their bearings so accurately as to pin-point the North Pole in the very crater of a volcano.

Years later, when Peary estimated his position as within three miles of the Pole, he was not content simply to travel that distance farther; instead, to make certain, he pushed on another ten miles and then returned by another course somewhat to one side. He had, in fact, traversed a flattened triangle round the Pole, but this was sufficient to have him acclaimed as its discoverer. Similarly, Scott's estimate of the South Pole's position differed from that of the Norwegian explorer by about half a mile but even if he had been correct that would not have invalidated Amundsen's claim to have been first there.

In real life it would have been enough for Hatteras to reach Queen's Island, and to map and explore it, for him to have been hailed as having discovered the North Pole—and he would have known this. Perhaps one might say that the nervous stability which, as Clawbonny noticed with growing uneasiness was mastering him, destroyed his judgement completely: he was insane, in a state of manic-depressive psychosis, before he even began to climb Mount Hatteras. He may have subconsciously realized that, having attained the great object of his life, he would have nothing else to live for.